

Gendered Perceptions of Climate Change and Climate Action

**A Comparative Study among Bangladeshi and Norwegian University Students
Studying and Living in Norway**

Tasnina Karim



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Faculty of Psychology
Department of Health Promotion and Development
University of Bergen

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CONTENTS

Acknowledgements.....	ii
Contents	iii
List of tables.....	vi
Glossary	vi
List of acronyms and abbreviations	vii
Abstract	viii
1. Introduction.....	1
1.1 Background	1
1.2 The relevance of this study for development studies and gender studies	2
1.2.1 Development studies and the SDGs	2
1.2.2 Gender studies	3
1.3 Research objectives	3
1.4 Outline of the thesis.....	4
2. Conceptual framework	5
2.1 Gender	5
2.2 Doing Gender	5
2.3 Masculinity and femininity	7
2.4 Gender identity	8
2.5 Application of theory	8
3. Literature review.....	10
3.1 Literature search procedure.....	10
3.2 Climate change.....	11
3.3 Perception of climate change among young people.....	12
3.4 Gender and climate change	14
3.4.1 Gender in adaptation and vulnerability	14
3.4.2 Gender in climate mitigation action	16
3.4 Research gap	19
4. Methodology	20
4.1 Research design.....	20
4.2 Location of the study	21
4.3 Recruitment of participants	21
4.4 Methods of data collection	23

4.4.1 Individual interview.....	23
4.5 Ethical considerations	24
4.5.1 Overall ethical issues and data management	24
4.5.2 Informed consent	24
4.5.3 Confidentiality and anonymity	25
4.6 Trustworthiness of research	25
4.6.1 Credibility	25
4.6.2 Dependability.....	26
4.6.3 Transferability	26
4.6.4 Confirmability	27
4.7 Role of the researcher.....	27
4.8 Data analysis framework	28
5. Understanding climate change and climate action	29
5.1 Observed changes and effects of climate change.....	29
5.2 Causes of climate change	32
5.3 Climate change mitigation	33
5.4 Source of climate change education.....	35
5.4.1 The first source of climate change knowledge	35
5.4.2 Current education sources and the role of media	37
5.4.3 Influence of political parties	39
5.5 Climate anxiety	40
5.6 Individual climate action	41
5.6.1 Food habits	42
5.6.2 Transportation choices.....	45
Chapter summary	47
6. Understanding gender	49
6.1 Defining Gender.....	49
6.2 Gendered expectations	52
6.2.1 Parenting.....	52
6.2.2 Traditional gender roles and norms	53
6.2.3 Gender expression	55
Chapter summary	58
7. Gender and climate change.....	59
7.1 Climate change understanding and gender.....	59

7.2 Mitigation actions and gender	63
7.2.1 Transportation choices and gender	65
7.2.2 Food consumption and gender.....	67
7.2.3 Consumption of clothes and gender	68
Chapter Summary.....	69
8. Discussion.....	71
8.1 Climate change understanding	71
8.1.1 Comparison of climate information.....	71
8.1.2 Climate mitigation and sense of responsibility.....	73
8.1.3 Climate education sources and their influences	74
8.1.4 Politics, gender and climate action	75
8.1.5 Age and climate concern	76
8.1.6 Reasons for individual climate action and inaction.....	77
8.2 Gender in climate change understanding and mitigation	79
8.2.1 Gender understanding in climate mitigation	79
8.2.2 The idea of ‘problematic men’	80
8.2.3 Sense of responsibility in gendered expectations	81
8.2.4 Gendered vulnerability	83
8.2.5 Gendered influence in climate action	84
8.3 Gender, gender identity and climate action.....	84
8.3.1 Food.....	85
8.3.2 Transportation.....	87
8.3.3 Clothing	88
8.4 Limitations and challenges.....	89
9. Conclusion	90
References.....	92
Appendices.....	100
Appendix 1. English Interview guide for the individual interview	100
Appendix 2. Bangla Interview guide for the individual interview.....	103
Appendix 3. Information letter and consent form	106
Appendix 4. Data analysis coding table	109
Appendix 5. Research approval by NSD	111

LIST OF TABLES

Table 1 List of participants in individual interviews with a pseudonym

GLOSSARY

Term	Meaning
Climate action / Mitigation action	Action that helps to mitigate climate change by ensuring environmental sustainability or reducing the causes of climate change
Climate concern	People's individual care and worry for climate change
Climate emotion	Climate associated emotion, mostly a feeling of anxiety, sadness, depression directly or indirectly caused by climate change
Climate events	Natural changes or disasters caused by climate change
Climate exposure / Climate experience	Experience of climate events
Climate knowledge	Factual, conceptual, and consequential understanding/awareness of climate change.

LIST OF ACRONYMS AND ABBREVIATIONS

BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BSUB	Bangladeshi Students Union in Bergen
CICERO	Center for International Climate Research
CPI	Corruption Perceptions Index
EPCC	European Perception of Climate Change
EV	Electric Vehicles
FPE	Feminist Political Ecology
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
MDG	Miljøpartiet De Grønne (Norwegian Green Party)
NSD	Norwegian Centre for Research Data
NVE	Norges vassdrags- og energidirektorat (Norwegian Energy Regulatory Authority)
PA	Paris Agreement
SDGs	Sustainable Development Goals
UiB	Universitetet i Bergen (University of Bergen)
UN	United Nations
UNCC	United Nations Climate Change
UNICEF	United Nations International Children's Emergency Fund
V2G	Vehicle-to-Grid
VPN	Virtual Private Network
WID	Women in Development
WED	Women, Environment and Development

ABSTRACT

Background: Climate change has become a global concern for sustainable development, in that it will go beyond nature's mitigating capability unless carbon emissions are minimized. People, particularly the young generation, are experiencing the uncertain and adverse impacts of climate change in all aspects of their lives. So, incorporating sustainable lifestyle choices and reducing carbon emission are crucial concerns for climate change mitigation. Additionally, gender is inextricably linked to climate vulnerability and mitigation action and gender, and climate change has been widely researched in light of sustainable development goals and development studies. To the best of my knowledge, no qualitative research has been undertaken focusing on the young generation to understand and compare how different climate experiences and sociocultural settings shape gendered climate change perceptions and climate action.

Objective: This study explores and compares gendered perceptions of climate change and climate action among Norwegian and Bangladeshi students studying and living in Norway.

Method: An interpretive phenomenological approach was applied to explore how climate change and gender are perceived by the students. This study is qualitative, and the method employed for data generation was semi-structured interviews. Individual interviews were conducted with six Bangladeshi and six Norwegian universities students with the equal male-female distribution. All the participants were students at different Norwegian universities and were living in Norway. Thematic Network Analysis (TNA) was used for data analysis after coding in NVivo.

Findings: The study found that participants, regardless of their national background, are knowledgeable about climate change, mitigation actions, and the association between climate change and gender. Though all participants could identify the changes in their surrounding environment, Bangladeshi participants reflected more on the natural changes than the Norwegians; in fact, climate change-driven impacts on their society were not mentioned by any Norwegian participants. Media, politics, and the education system played a significant role in shaping participants' understanding of climate change, and media influenced participants' climate action in particular. The study showed that climate awareness does not always lead to choosing mitigation action.

Gender norms influence how participants perceived the link between climate change and gender, and this perception could further impact participants' climate mitigation action and inaction. Besides, the findings revealed that financial inability, lack of proper climate-friendly facilities, and sociocultural background were reasons for participants' climate inaction; still, the study found that there were gender differences in participants' climate action. Their individual climate actions were linked explicitly and implicitly to their 'doing gender' and attempt to adhere to the ideals of masculinity and femininity. In addition, the gender identity of an individual could be endangered depending on the climate action taken; for example, the study findings indicate that male participants' meat consumption was indirectly associated with their masculine identity, whereas female participants' consumption of clothes could come from a social pressure to conform to feminine ideals.

Conclusion: Gender, climate education, geographical location and experience of climate-induced events influence climate change understanding. While exploring students' perception of climate change, it seemed that Bangladeshi participants were more aware and informed than the Norwegian participants. However, when comparing along gendered lines, female participants appeared as more concerned and expressed more emotional disturbance for the environment than male participants. Though climate actions were associated with gendered expectations stemming from traditional views on masculinity and femininity, emergent features related to notions of 'new masculinity' and 'undoing gender' could stimulate gender equality in climate mitigation action.

Keywords: *climate change, gender, young generation, university students, climate action, Norway, Bangladesh, new masculinity*

1. INTRODUCTION

1.1 BACKGROUND

Climate change is one common challenge that the young generation is facing irrespective of where they find themselves in the world. It is one of the impediments that negatively influences and limits the opportunities for the sustainable future of the world. So, climate change mitigation is no longer a choice; rather, it is necessary and cannot wait. The more we delay climate action, the more complicated and challenging it will be for the current young generation because they are and will be explicitly affected by all environmental changes ahead of us. Thus, the young generation is to take the lead in developing strategies to address climate change through the development and implementation of alternative sustainable solutions to emerging issues, among others particularly related to their lifestyle choices and consumption patterns. As a result, understanding the young generation's climate change beliefs and perceptions is necessary in order to motivate them to pursue a sustainable life.

While climate change is regarded as a global concern, its consequences are not globally uniform. Rather, they vary between countries, communities, generations, social structures, and genders. Gender is a significant topic to consider in the context of climate mitigation because sustainable options are often seen as feminine (Lee, 2009; 2013, p. 6; Ruby & Heine, 2011; Thomas, 2016), which eventually may lead men to resist green actions to uphold masculine images (Brough et al., 2016) and avoid social exclusion due to not exercising hegemonic masculinity (Sumpter, 2015). Gender differences are profoundly embedded in religious, sociocultural, and political structures and thus vary across communities, regions and nations. This research adopts a gender lens to examine climate change perceptions and mitigation actions of young university students in the global South and global North, focusing on Bangladesh and Norway.

As one of the most developed and least vulnerable countries to climate change, Norway pledged to become a carbon-neutral country by 2030 (Nordic Energy Research, 2015). Moreover, Norway stands second in the World Economic Forum's latest Global Gender Gap Index (WEF, 2020), which reveals the high gender equality status of 2020 in Norway, both as concerns economy, politics, health and education. This status of being a gender-equal and developed country may impact Norwegian people's (gendered) perception and practice of climate change action, in contrast to people from other countries like Bangladesh. Bangladesh's vulnerability to climate

change is universally acknowledged, and the country is experiencing intensified and frequent climate events such as drought, storm surge, flood and sea-level rise (Karim & Mimura, 2008). As concerns gender, national and international policies, organizations, and research studies recognize gender disparities in Bangladesh and emphasize women's climate change vulnerabilities and adaptation measures (Dankelman, 2008). Hence, as a developing country with a patriarchal social structure, Bangladesh is living the consequences of climate change in a different manner than Norway.

In light of the above contextual facts about the two countries, this study will seek to understand and compare how different factors like culture, environment and experience of climate-induced calamities influence climate change perception of Norwegian and Bangladeshi students living in Norway and explore whether/to what extent these factors have impacts on mitigation strategies in their daily life. For effectiveness and efficiency, men and women need to be equally involved in mitigation practices; otherwise, climate change can exacerbate gender inequalities (UNDP, 2009). Thus, this study also draws attention to gender disparities among young university students, which are often disregarded and yet vital to the formulation of climate change understanding and implementing climate action. Including a gender perspective can disclose underlying gendered issues and open up for an investigation of the association between gender inequality (SDG 5) and climate action (SDG 13). Additionally, comparing groups of students from different sociocultural and environmental settings also helps to understand the similarities and dissimilarities of young people from the global South and the global North as concerns climate action.

1.2 THE RELEVANCE OF THIS STUDY FOR DEVELOPMENT STUDIES AND GENDER STUDIES

1.2.1 Development studies and the SDGs:

Climate change acts as a threat multiplier by affecting all aspects of the sustainable development agenda, from poverty reduction to fulfilling basic needs and economic progress to declining disaster risk. Thus, achieving the SDGs is impossible without adopting climate change adaptation and mitigation strategies, and the SDGs fulfilment requires an optimistic attitude and active participation of people from all nations, races, and classes. As emphasized by the UN news (2020) on the SDGs and climate change, young people should be at the forefront to respond to global challenges. In addition, young people are the most well-equipped players to develop ideas,

disseminate knowledge and educate people from all sectors to behave sustainably. I believe this study explicitly addresses climate change and implicitly reflects on the SDGs by understanding the perception of climate change and focusing on the factors that limit young people's climate change mitigation actions.

1.2.2 Gender studies:

As the possibility of environmental damage increases, the need to foster environmental awareness and eco-friendly behavior becomes more imperative. One of the barriers found in prior studies (Lee, 2009; Mostafa, 2007; Tikka et al., 2000; Zelezny et al., 2000) is the gender gap in environmental sustainability, indicating that gender differences exist in environmental understanding, perceptions, values and actions, and arguing that women are more environment-friendly than men. In addition, gender identity maintenance deriving from men's and women's desire to adhere to masculine and feminine stereotypes could also lead to a gender gap in climate change mitigation approaches; however, a custom or practice that is considered masculine in a society may be regarded as effeminate in another culture. Thus, it is essential to gain knowledge on how and what practices of climate action are viewed as masculine or feminine in different societies and to what extent gender stereotypes motivate an individual to oppose to undertake climate mitigation action. This comparative study of Bangladeshi and Norwegian students will provide insights into the ways that sociocultural differences influence the gendered perception of climate change and the gender role in climate action. I believe this study contributes to the existing literature on climate change and gender studies.

1.3 RESEARCH OBJECTIVES

Primary objective:

The primary objective of this study is to explore and compare gendered perceptions of climate change and climate action among Norwegian and Bangladeshi students studying and living in Norway.

Sub-objectives:

- To understand and compare students' perception of climate change and how their opinions are gendered.
- To explore students' understanding of how gender plays a role in climate change and whether students' own sense of responsibility to mitigate climate change is gendered.

- To explore how the students take sustainable action in their daily life to act environmentally friendly and whether these actions are gendered.
- To understand how the students relate gender, gender identity and mitigation action, including their own gender identity.

1.4 OUTLINE OF THE THESIS

This thesis has nine chapters. After introducing the research contexts and research objectives in chapter one, chapter two presents the theoretical framework. The literature review for this research is presented in chapter three, followed by the research design and methodology in chapter four. Chapter five, six and seven present the research findings. The discussion of the findings is covered in chapter eight, and finally, chapter nine presents the conclusion of this study.

2. CONCEPTUAL FRAMEWORK

This study will work with three different conceptual tools falling within a social constructivist perspective of gender to interpret the study data and explain empirical findings. In this chapter, I introduce the concepts of gender as a social construct, gender identity, doing gender and masculinity and femininity. Together they will enable me to critically explore how perceptions of climate change and climate action are gendered among the Norwegian and Bangladeshi participants. This chapter also presents my rationale for using these concepts as my framework of analysis.

2.1 GENDER

Pryzgoda and Chrisler (2011), in their 'Distinguishing between Sex and Gender', state that gender usually denotes social, psychological and behavioral characteristics of men and women, whereas sex is viewed as the differences between biological aspects of male and female. Ridgeway and Correll (2004) emphasize institutionalized aspects of gender and gendered hierarchies. According to them, gender is an institutionalized structure of social processes that divide individuals into two separate groups, men and women, and based on that distinction, organizes hierarchies. Besides, cultural beliefs about gender and stereotypical gender perceptions influence individual gendered behavior. They further argue that when people enter a social setting, they need to identify themselves in relation to others; that is, to display their gender appropriately, for others to regard them accordingly. Ridgeway (2009) argues that our behavior is shaped by the gender-stereotyped notion and people perceive gender through masculine and feminine characteristics available in the culture we live in. Besides, Connell (2002) and Thorne (1993) emphasize that these male and female social roles and opportunities are context and time-specific and thus changeable.

2.2 DOING GENDER

As argued by West and Zimmerman (1987), people cannot "have" gender - gender is a social construction in which people "do" gender by acting out what is expected of them. Doing gender implies actions of masculinity and femininity in the context of the assumed sex category. Sex, as described by West and Zimmerman (1987), is “*a determination made through the application of socially agreed upon biological criteria for classifying person as females or males*” (p. 127). These biological criteria can be “*genitalia at birth or chromosomal typing before birth*” (p. 127). Sex category is the assumed sex we assign to individuals regardless of their gender identification.

They describe gender as the practice/development of “*managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's sex category*” (p. 127). So, expectations of how men and women should behave are crucial to understand ‘doing gender’ (West & Zimmerman, 2009). While gender is ‘done’ by a person, West and Zimmerman (1987) claim that it only makes sense when it is done in the presence of others, i.e., when expressing one’s gender in relation to others. So, ‘doing gender’ requires an interactional situation. They argue that doing gender is influenced by social dynamics and is rooted in every part of our individual daily experiences. Ridgeway and Correll (2004) note that assumed gender roles and behaviors are also influenced by institutionalized social norms and structure. These norms and structures are reproduced through an individual's interaction with others and allow men and women to view society and culture differently. Thus, gendered institutions will exist as the gender structures continue to be enacted by people (Connell & Pearse, 2015; West & Zimmerman, 1987).

Connell (2002) asserts that gender learning is a bilateral process and the individual acts as an active learner. She argues that gender practice is shaped by the “gender order” of society. She explains “gender order” as the “collection of relationship” under which individuals are “responsible” to perform their expected gender behavior. Similar to West and Zimmerman (1987), Connell (2002) asserts that gender is something one “does” rather than “is” as one is not free to create his/her own gender. However, as the gendered meanings and norms are different across geopolitical boundaries, the person adopts what has been deemed suitable for their culture, wherein these meanings and norms undergo transformation over time (Connell & Pearse, 2015, p. 84).

According to Deutsch (2007), doing gender (West & Zimmerman, 1987) disregards the connections between “*social interaction and structural change*” (p. 107). She thus gives importance to “*social processes that underlie resistance against conventional gender relations and on how successful change in the power dynamics and inequities between men and women can be accomplished*” (p. 107). Deutsch (2007) shed light on the need to shift from ‘doing gender’ to ‘undoing gender’, which refers to “*social interactions that reduce gender difference*” (p. 122). She argues that though ‘doing gender’ “*encompass[es] both conformity and resistance... the phrase ‘doing gender’ evokes conformity to gendered norms*” (p. 122).

2.3 MASCULINITY AND FEMININITY

Masculinity and femininity are typically referred to as attributes or traits associated with being male or female, respectively. Windsor (2015) argues that “*the social construction of gender relies on a binary gender system that positions men and masculinity as fundamentally different from women and femininity*” (p. 893). According to Schippers (2007), in comparison with masculinity, femininity is undesirable and femininity subordinates to masculinity because conventional characteristics of femininity “*includes physical vulnerability, an inability to use violence effectively, and compliance*” (p. 91). She cites the study of Connell and Messerschmidt (2005), where they argue that the concept of femininity is substantially under-theorized (p. 84).

The concept of masculinity by Connell (1995) is similar to her interpretation of gender, which is related to structure and social practice. Connell (2005) defines masculinity as “*simultaneously a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality and culture*” (p. 71). According to Connell (1995), masculinity is created through an interaction with femininity. Thus, both are interconnected and exist in parallel. However, referring to West and Zimmerman (1987), men who oppose socially established gender roles often undergo more extreme judgments than women who disobey gender norms. As a consequence, men are more likely to feel social pressure to adhere to the dominant notions of masculinity which Connell (1995) identifies as “hegemonic masculinity”. She states that the idea of hegemonic masculinity is commonly characterized as an expression of normative masculine values, ideas, and practices, which are considered as an ideal type of manliness.

Hegemonic masculinity is regarded as the most perfect form of masculinity in society (Connell, 1995). Thus, it is expected that most men participate in activities that attempt to uphold hegemonic masculinity. Connell and Messerschmidt (2005, p. 851) relate masculine identities through examples of eating meat and taking a risk on the road and argue for a complete overhaul of these practices and their associated identities. Similarly, feminine attributes are observed with maintaining a specific appearance through clothing (Braizaz, 2019) and sustainable behavior (Brough et al., 2016). However, it is important to remember that masculinities and femininities take shape within the frames of existing societal and historical conditions (Connell, 1995). Therefore, what is considered masculine/feminine in a society may not be regarded as masculine/feminine in another culture.

2.4 GENDER IDENTITY

Morrow (2006, p. 8) describe gender identity as *"an individual's personal sense of identity as masculine or feminine, or some combination thereof"*. They emphasize an individual's inner feelings, which are "private and invisible". According to Rasmussen (2009, p. 438), gender identity is *"...how one appears to others"*. Her definition of gender identity is associated more with gender expression than self-awareness of the biological sex. A person's gender identity may be congruent with their gender appearance; however, it may also be incongruent if they feel unsafe or unsupported or don't have the tools they need to practice gender expression that truly portrays their gender identity (Summers, 2017, p. 231).

As soon as our birth sex is determined, we are subjected to a social mechanism that promotes gender identity and gender expression (Bussey, 2011). As claimed by Carter (2014), adults behave and treat children or infants differently based on their gender, shaping behavior patterns and gender boundaries. These boundaries are eventually *'internalized and become identity standards'* from childhood that *'provide information on how to act across various situations'* and *'compare the self to others'* (pp. 244, 246). Therefore, even before knowing the societal-gender stereotypes, children are inclined to do activities that are [stereotypically] associated with their gender. Gender identities become important to children as they grow up and develop personhood. Connell and Pearse (2015, p. 6) argue that identity contains our ideas of belonging; *"what kind of person we are, in consequence of being a woman or a man"*. The concept of "gender identity" recognizes gender representation in personal life (p. 99). Identity formation is a gradual process that develops over a long period of time with our personal experiences, which include the way we grow up, how we pursue our family lives and sexual interactions, how we view ourselves in daily circumstances, and how we perceive ourselves (p. 93). Therefore, the construction of gender identity is both a personal and social process. Gender identities are fluid entities that can be changed in social interactions, and *"the more one 'does gender' among others in interactions, the more likely ones gender identity will become more committed, and thus salient within the self"* (Carter, 2014, p. 247).

2.5 APPLICATION OF THEORY

As discussed in the above, gender identities and attributes of masculinity and femininity are a product of social and cultural processes. However, these identities and structures can affect and/or

influence people's perceptions of climate change understanding as well as climate action. My primary research goal is to explore and compare the gendered perceptions of climate change and climate action among Norwegian and Bangladeshi students studying and living in Norway. The study participants have grown up in two distinct socio-political contexts, which allows for a comparison of how different gendered norms and relations influence one's behavior towards climate change action. Analyzing aspects of climate change through this gendered lens opens up a space for discussion not only of the perceptions but also on the constraints that participants might feel from their society, culture, or surroundings.

As gender identity is rarely discussed in the climate change context, this study will contribute to an enhanced understanding of the association between gender identity and climate action. Besides, gender and gender identity conceptions are useful to explore how and why male and female students with different sociocultural backgrounds experience similar or different forms of gender identity and gender relations in climate change perception and practice. Drawing on the idea of "doing gender", this study explores how students practice gender regarding climate change mitigation actions. Also, the concept of masculinity and femininity direct me to investigate whether and which climate change practices of students are related to the desire to express masculine and feminine identities. Though the conceptual tools discussed in this section are overlapping and interconnected, I believe that they, by illustrating various aspects of gender experience, offer a guideline for recognizing how participants' actions are gendered, even though they are not aware of it.

3. LITERATURE REVIEW

In this chapter, I will address the existing literature relevant to my research study and research questions. I will focus on the studies that examine young people's perception of climate change and climate action, particularly on gender and young people. This review will provide a framework for my research and offer further insight into my findings. I will also identify a possible gap in the existing literature and how my study will fill the void.

This study has been inspired by the work of former UiB student at the GLODE program, Marte Hoogerhuis Alsaker (2020). We both looked into gendered perceptions of climate change and climate actions among young students and have worked with similar theoretical frameworks. While Alsaker's study focused on students in Amsterdam, my study was framed to draw a comparison between Bangladeshi and Norwegian students who were living in Norway and studying in Norwegian universities. To compare the influence of the two different social and environmental settings of Bangladesh and Norway on participants, this study has developed research objectives diverging from those of Alsaker (2020), and has reviewed and engaged with a different pool of research literature.

A comprehensive search for literature on gender and climate change was performed. After rigorous searching, I found that gender has been mostly addressed in climate change adaptation and mitigation studies and in studies addressing women's vulnerability of developing countries in the global South. In recent years it has also been explored in the context of the global North, including studies on young people's perception. However, I really had very little literature on the climate change understanding and climate action of young people from Bangladesh or Asia, which is related to my study.

3.1 LITERATURE SEARCH PROCEDURE

I undertook a Google Scholar preliminary search for papers that documented evidence on the following two topics: understanding climate change and gender, climate action and gender. The initial quest in Google Scholar assisted me to recognize relevant keywords and those keywords were helpful to find literature in the Web of Science and Oria (the University of Bergen Library database). A separate query was conducted for '*understanding*' which includes causes, effects, mitigation and education sources of climate change. Similarly, the '*climate action*' search involved personal mitigation concerning food, transportation and clothing. Maximum three terms were used

in each query, for instance, young people AND climate action AND gender. Thus, for particular climate action such as food habits, a set of search strings was used that combined the following terms: "young people"/"youth"/"people"/"gender" AND "food habit"/"sustainable consumption"/"meat consumption" AND "climate change"/"global warming"/"environmental concern"/"sustainability". A similar search was conducted to find literature on each topic. Besides, I narrowed my literature searches to English language journals and restricted them to publications after 2000. As my research study is focused on the young generation of Bangladesh and Norway, research location and gender were also given priority to find similar studies.

3.2 CLIMATE CHANGE

Climate change is a key challenge in attaining sustainable development goals and global development. The Intergovernmental Panel on Climate Change (IPCC) (2007) defines it in the following way, "*Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity*". Greenhouse gas (GHG) emissions to the atmosphere lead to global warming and cause climate change (Althor et al., 2016). However, there is a continuous discussion on the historical responsibility of GHG emission, where it is believed that countries of the global North are more accountable for environmental destruction than those of the global South (Parks & Roberts, 2008). Though climate change has become a global issue, IPCC (2007) concluded that the magnitude of climate change impact on a particular region vary over time and adaptation to climate change depends on various social and environmental processes. Regarding climate exposure, the poorest people in the global South are more vulnerable to climate change and subjected to climate events (Connell & Pearse, 2015; IPCC, 2014; Skoufias et al., 2011) and this claim seems to apply to the two countries of my study: Norway and Bangladesh. Bangladesh, a developing country of the global South, faces the detrimental effects of climate change and is referred to as "ground zero for climate change" (Rahman, 2018), being an extreme climate-vulnerable country. Geographical position, floodplains dominance, low sea level (Ayers et al., 2014), high population density, poverty (Thomas et al., 2013), and pervasive reliance on nature for livelihoods are factors triggering Bangladesh's susceptibility to climate change. The report of Bangladesh Climate Change Strategy and Action Plan (BCCSAP, 2008) stated that climate change results in increased natural disasters such as drought, flood, cyclone, storm surge,

extreme temperature, sea-level rise and salinity intrusion in Bangladesh and have observable effects on agriculture, livelihood, food, water, health and shelter.

On the other hand, Norway, a developed country of the global North, is considered to contribute to climate change more than Bangladesh but is experiencing less of its effects. Norwegian Energy Regulatory Authority (NVE, 2020) disclosed that 98% of Norway's electricity is generated from renewable resources in 2019. Despite sustainable credentials, they also claimed that Norway is one of the largest oil and natural gas producers and exporter globally, which causes a significant percentage of global GHG emissions. The Center for International Climate Research (CICERO) have several studies (Sygna et al., 2004; Torvanger et al., 2019) on the socioeconomic impact of climate change in Norway. The findings from one of this study (Torvanger et al., 2019) showed that Norway is experiencing increased heat and precipitation and more likely to suffer significant events like flood, sea-level rise, landslides, wildfires due to climate change. These environmental changes are expected to negatively affect aquaculture, agriculture, health, infrastructure, tourism and by implication the Norwegian economy.

Besides environmental shocks, Doherty and Clayton (2011), in their study of psychological impacts of climate change, argued that “*Climate change is as much a psychological and social phenomenon as a matter of biodiversity and geophysics and has impacts beyond the biophysical*” (p. 266). The study highlights intense emotions like depression and anxiety as the indirect psychological effects of climate change. However, some studies have also found that direct or indirect climate associated emotions are influenced by gender (Bloodhart et al., 2019), one's resilience or vulnerability to climate change (Brklacich et al., 2007) and experience of extreme weather or climate events (Costello et al., 2009; Howe et al., 2019; Shukla, 2006).

3.3 PERCEPTION OF CLIMATE CHANGE AMONG YOUNG PEOPLE

More than 15% of the global population comprises young people between 15 to 24 years old whose future is threatened by global climate change (UNCC, 2020). Besides, young people's voice and contribution are crucial in achieving the sustainable development goals and the Paris Agreement (PA) (UNCC, 2020). Hence, the perception of climate change and climate action by the young generation has gained attention in recent studies. A large number of opinion surveys have been conducted, especially in the USA and numerous European countries, to understand people's perception of climate change. Tvinnereim and Fløttum (2015), in their open-ended survey about

climate change, found that social aspects of climate change are more emphasized by the Norwegians than what the previous studies from the U.S. and U.K. have shown. Further, a cross-national quantitative survey on European Perception of Climate Change (EPCC) (2017) study carried out in France, Norway, the United Kingdom, Germany in 2016 claimed that Europeans, including Norwegians, are informed about climate change but not alarmed. The study also says that though the consequences of climate change in Norway are expected to be less extreme than elsewhere in the world, a lower level of skepticism exists among the Norwegian to whether climate change is anthropogenic than the other countries. Besides, an optimistic view of tackling the climate crisis by science and technology has been observed in a mixed-method study on climate change attitudes of Norwegian young people within the age group of 16 to 25 (Fløttum et al., 2016). The above-mentioned studies represent highly interesting results, however none of them pay attention to gender issues.

There have been relatively few studies carried out on young people's perception of climate change in Bangladesh compared to developed countries. The existing research (Alam et al., 2017; Rahman & Alam, 2016; Uddin et al., 2017) on climate change perception has been mostly focused on the adaptation and vulnerabilities of the vulnerable communities that are involved in activities connected to nature like farmers, fishermen and daily wage labourers. In 2020, UNICEF (2021) conducted a quantitative survey on youth perception of climate change in Bangladesh with more than 5,500 respondents between 15-24 years old and with equal male-female and rural-urban distribution. The study concluded that most respondents are worried and report periods of disruption in their studies due to climate change. Also, optimistic attitudes towards climate change were found among the respondents, provided that they are given the necessary assistance. However, Haq and Ahmed (2020) shed light on the climate change perception of young university students. Their quantitative survey among 650 undergraduate students from different academic disciplines found a statistically significant correlation between climate change understanding and gender, experienced climate events and climate education. According to them, male students who have observed adverse weather events in their hometown and have taken some course relevant to the environment are more likely to perceive temperature as rising than the female students. In general, their findings supported that climate concern and perception are influenced by climate exposure and home locality, i.e., geographical location. Another mixed-method study on extreme climate-vulnerable people in Bangladesh supported that climate change consciousness varies

depending on the socio-demographic dimension (gender, age, religion, marital status) (Haq & Ahmed, 2017). Interestingly, in the last two mentioned studies, a majority of the research population believed that climate change is manmade or natural, while a small but substantial number of people attributed climate change to religion, i.e., as an act of God.

Several studies showed how climate change and behavior towards climate action are influenced by different factors. A quantitative analysis (Dawson & Carson, 2013) among Australian secondary school found that students gain climate change knowledge through science and geography education in school and through different media, including the internet, television, newspaper. Similarly, Rousell and Cutter (2020), in their systematic review paper on the source of climate change education for children and young people, found that the dominant source of climate education is science-based formal education. Besides, mass media strongly affect people's climate change opinion but rarely lead to behavior changes. However, some other studies (Anderson, 2017; Mavrodieva et al., 2019) showed a visible connection between social media and shifting public views of climate change. Anderson (2017) found that sharing information through social media may boost awareness and support environmentally friendly behavior. Still, there are also risks of reinforcing opinions and encouraging undesirable behavior, which could be negative for climate change mitigation. In addition, Lee (2009) argued that peer influence is the most important indicator of green purchasing activity among male and female adolescents in Hong Kong. It has also been observed that female participants recorded higher degrees of environmentally friendly attitudes, perceived severity of environmental issues, peer control, and green purchasing behavior than male. Besides, in a systematic review paper on how young people engage with climate change, researchers (Corner et al., 2015) found that the government is considered responsible by young people for addressing climate change, but their trust level in government is very low. Regarding political leaders, Kousser and Tranter (2018) showed how Australia's political leaders positively influence peoples' climate change attitudes.

3.4 GENDER AND CLIMATE CHANGE

3.4.1 Gender in adaptation and vulnerability

A series of studies have indicated that the vulnerability of women in relation to climate events is associated with gendered norms and gendered divisions of labor such as during flood, women's vulnerability increases due to their caregiver role to children and elderly, religious or cultural

restriction of mobility (Rahman, 2013; Sultana, 2014), nutritional health status (Cannon, 2002; Rahman, 2013), ethnicity, class and political factors (Hankivsky, 2014). Similarly, Ahmed and Fajber (2009) pointed out that post-disaster vulnerability tends to affect women more than men as they are more reliant on the natural environment in their daily activities. Furthermore, scholars also have noted gender inequality in accessing resources (Bee, 2013), education or disaster warning (Ahmed & Fajber, 2009), gender-stereotyped social attitudes (Dasgupta et al., 2010), social insecurity, unequal power relation and limited sheltering place (Rahman, 2013) as elements which make the bad situation worse for women than for men. Alston (2013) acknowledged that the female gender continues to be correlated with poverty and vulnerability. This linking of deprivation and women is investigated by Masika (2002), and she illustrated how the link hides the fundamental systemic and institutional underpinnings of gender inequality, which are not synonymous with women's vulnerability but closely related to it.

While women's vulnerability to climate change is acknowledged, some scholars have criticized this presumed vulnerability and concluded that there is a need to move beyond this view of seeing women as particularly vulnerable (Arora-Jonsson, 2011; Carr & Thompson, 2014; Kaijser & Kronsell, 2014). These scholars found that gender in development is often limited to simple distinctions between men and women, in which women are portrayed as vulnerable, marginalized victims and caregivers. Besides, the tendency is towards portraying women as victims rather than as actors who can work positively towards climate action. Masika (2002), in her gender, development and climate discussion, emphasized how generalizations in climate change debate group all people in the global South together. She also claimed that this generalization overlooks essential gender differences in knowledge, resources and power that shape the outcomes of climate change development and adaptation. Further, in an intersectional analysis of climate change, Kaijser and Kronsell (2014) illustrated the danger of working on the basis of simplified categories and not considering the social structure and cultural disparities within different societies.

It is often assumed that women are '*closer to nature*' than men (Gupte, 2002; Salman & Iqbal, 2007) and thus that environmental protection is primarily, or partially, the duty of women (Nelson et al., 2002). Hence, development plans and relief often rely very strongly on women's unpaid work, believing that women are instinctively prepared to support their families and societies by preserving their livelihood environment. Leach (1992) argued that the discourse of Women, Environment and Development (WED) from the ideology of eco-feminism influences the notion

of such generalization promoting women's roles in protecting nature as well as in climate change adaptation and resilience. Resurrección (2013) and Tschakert and Machado (2012), in their climate change adaptation research, showed that such generalization views women as a homogeneous group which ignores the dynamics of social power that resulting in 'one size fits all' programs and reinforcing inequalities rather than transforming them. Additionally, researchers have critiqued the established view of women's closeness to nature, seeing it as conceptually flawed (Roach, 1991), increasing the burden on women (Leach, 2007; Nelson et al., 2002).

3.4.2 Gender in climate mitigation action

Gender in mitigation studies is discussed less often than in adaptation studies. Some scholars (Djouidi et al., 2016; Johnsson-Latham, 2007; Masika, 2002) related the absence of studies on gender issues and climate change mitigation with the fact that science and technology approaches are generally considered masculine field. Besides technology, Costa and Bisquert (2019) explained mitigation strategies as being composed of small modifications of daily activities such as seeking sustainable food consumption and low energy-demanding transportation. Considering the abundance of literature and crucial importance in the debates around gendered mitigation action, the study has focused on individual climate actions concerning clothes consumption, food habits and transportation use. These gendered mitigation efforts will be discussed in the next subsections.

3.4.2a Food consumption: Food production and consumption have been given significant importance in climate change adaptation and mitigation. Individual people's food habits are influenced by their economic condition, culture (Arganini et al., 2012) and religion (Tan et al., 2013). Schösler et al. (2015), in their study of meat and masculinity with young people from three different ethnic groups in the Netherlands, reported that the willingness to switch food habit is influenced by ethnicity and food culture. Turks in the Netherlands were less likely than Chinese and Native Dutch to change their meat intake. They argued that as meat is an integral part of traditional Turkish cuisine, replacing meat with a vegetarian alternative is less simple than in the diet of the other two groups.

The subject of food preferences shows consistent gender disparities. It becomes evident from different studies that women are more inclined to have a vegan or vegetarian diet than men in Western societies (Rothgerber, 2013; Rudy, 2012). Similarly, in their systematic review study on "consumer attitudes towards environmental concerns of meat consumption", Sanchez-Sabate and Sabaté (2019) discovered that the environment is not the primary motive to decrease Western

people's meat intake. Only a minority of people limit their meat consumption from an environmental concern. Besides, they also found that curtailing meat consumption is the least favored approaches to reduce climate change relative to other habits, such as driving less. However, apart from nutritional advantage, the ethical concern could be a reason to avoid meat, and women are more aware than men about animal rights (Rothgerber, 2013). A research carried out by Lea and Worsley (2003) also demonstrated that animal welfare acts concerns as a moderator of vegetarianism, particularly among women.

Several studies have shown that stereotypical preconceived masculine and feminine roles have an impact on sustainable food consumption, for instance, an association of particular food habits with masculinity (Kildal & Syse, 2017; Rothgerber, 2013; Ruby & Heine, 2011; Sumpter, 2015; Thomas, 2016). Kildal and Syse (2017), in their qualitative research on the social and cultural role of food, have demonstrated how meat consumption relates to masculinity and comfortability among the Norwegian armed forces. Research showed that men who are disinterested in meat are perceived as less masculine, and masculinity is associated with unhealthy eating (Zhu et al., 2015). On the other hand, being vegetarian or healthy eating is seen as an expression of femininity. In this regard, Gal and Wilkie (2010) argued that to conform to one's masculine gender identity, food is important, especially when the consumption occurs in public (White & Dahl, 2006) and women are less concerned with making gender congruent food choices than men (Gal & Wilkie, 2010). However, it is important to note that there has been a noticeable shift in the view of meat consumption and masculinity association. Thomas (2016), in a quantitative study with Amazon Mechanical Turk workers in the US, suggested that a changed attitude towards masculinity and food habits could result from growing awareness and increased popularity of vegetarianism. Recent studies showed that "new masculinity" is emerging where men embrace vegetarianism positively (De Backer et al., 2020) due to their self-awareness of the negative impacts of traditional gender norms (Kaplan et al., 2017).

3.4.2b Transportation: Transportation is not gender-neutral and is interrelated to climate change as a significant amount of greenhouse gas emission is caused by transportation. Compared to private vehicles, using public transport is more sustainable due to lower carbon emissions, and studies in European countries also have revealed gender disparities in transportation use (Cristaldi, 2005; Rätty & Carlsson-Kanyama, 2010). Women tend to travel more sustainably than men by using public transport more frequently than cars. Brough. et al. (2016), researching gender and

climate change, argued that this green behavior is often perceived as feminine. Also, Wang (2016), in her study of green practices and building on a variety of other references, such as Terry (2009), on transportation, showed that the transportation sector is perceived as a masculine area of interest and expertise. In contrast, several reports on women's safety and mobility (Gardner et al., 2017; Mazumder & Pokharel, 2019) demonstrated that sexual harassment inside the public vehicle is a common experience for women across the globe, especially in Asia (Anna et al., 2017). This restricts women to choose public transport, and Bangladesh is not an exception. In Europe, choice of transportation mode is highlighted more than women's safety in discussions about gender, transportation and sustainability, and thus electric vehicles have become a common concern. Anfinssen, Lagesen and Ryhaug (2019), in a qualitative study on electric vehicles users in Norway, disclosed that Norwegians, irrespective of gender, are equally interested in electric vehicles. Their study claimed that stereotypical "feminine environmentalism and masculine fascination with technology" is present in Norway and argued that women emphasize sustainability, whereas mechanical aspects of electric vehicles are more prioritized by men. Besides, transportation choice, mobility pattern between men and women shows gender disparity. In a comparative and mixed study (Sovacool et al., 2019) on 'environmental values in Nordic transport practices', it was observed that men are more inclined to use their private cars and use less public transport than women. The study (Sovacool et al., 2019) also showed that women have higher levels of environmental awareness than men regarding vehicles in all Nordic countries (Denmark, Norway, Iceland, Sweden and Finland).

3.4.2c Clothing: The textile industry requires substantial energy, generates pollution, and discharges waste into the environment during cloth manufacture and disposal (The World Bank, 2019), which eventually causes a threat to human and animal life (Khan & Malik, 2013). Handa and Khare (2013) conducted quantitative research on Indian youth and showed that women purchase more clothing than men. Thus, it can be said that Indian women are contributing more to greenhouse gas emissions from textile, especially for clothing, than men. In this regard, Bloodhart and Swim (2020), in their study on sustainability and consumption, argued that women are usually responsible or expected to buy clothing for family members or others, and thus, gender roles and gendered practices could influence their increased cloth purchase compared to men. On the other hand, women are pressured by society to think about their appearance through their clothes (Bloodhart & Swim, 2020). Also, clothing is one of the key elements to uphold gendered beauty

standards and is seen as an expression of one's gender identity (Goodman et al., 2007), and this could be another reason for women to be intensively concerned about clothing.

3.4 RESEARCH GAP

Norway and Bangladesh hold two opposite positions regarding the experience of both gender equality and climate change events. Although Bangladesh, in the past 20 years, has seen a remarkable rise in women's position in the social, political, and economic spheres, it is still far away from being equal to men, and the society is still rather patriarchal. Besides, Bangladesh is one of the most vulnerable country to climate change today. On the other hand, the most gender-equal country Norway is among the countries least exposed to climate change vulnerability.

Climate action is believed to be largely influenced by climate perception, and an immediate and inclusive global effort by the young generation is required to combat climate change. Undoubtedly, young people play a significant role in any nation and understanding their attitudes towards development as well as climate change is a prerequisite to formulate or implement any policy or project regarding sustainable advancement or adaptation and mitigation to climate change. However, little qualitative research regarding climate change perception has been undertaken on this specific demographic group. Hence, a more detailed investigation of young people is required to obtain more precise knowledge of their understandings of the climate change challenges. Besides, research shows, based on prevailing gender roles and identities, that men and women contribute differently to carbon emissions and climate change. These differences are expressed by their behavior and consumption patterns. Hence, it is crucial to further explore how and to what extent students' opinions and mitigation actions in climate change are gendered. To the best of my knowledge, no qualitative research has been conducted to understand and compare gendered climate change perception between young people from two different countries of the global North and South, with a focus on university students. I believe this qualitative study on the gendered perception of climate change among university students will fill a gap. Engaging students of diverse backgrounds may yield surprising results when it comes to climate change attitudes and actions compared to research done with a more homogenous group of students. In addition, this study will assist in understanding the basis for political decision making to avoid the adverse impacts of climate change and promote a transition towards a sustainable future by embracing climate action, goal 13 of the SDGs.

4. METHODOLOGY

This chapter reflects on the methodological approach chosen to address the study objectives presented in chapter one. I will begin by explaining the research design and research location, followed by an overview of the recruitment of participants and the data collection process. Besides, I will delve into ethical issues, emphasizing confidentiality, consent, and possible ethical dilemmas. Then I will explain the steps taken to ensure the research's quality in terms of trustworthiness. Finally, this chapter will direct the reader to the data analysis process of the findings.

4.1 RESEARCH DESIGN

The research attempts to explore and compare the gendered perception of climate change and climate action among Norwegian and Bangladeshi students. Hence, I worked on the basis of an interpretative philosophical position and employed a qualitative methodology in my research study. The interpretative philosophical paradigm emphasizes meaningful social action and socially constructed meanings occurring in a natural setting (Neuman, 2014, p. 113). Interpretative philosophy is relevant to my research because I am trying to understand how and whether my study participants of two different countries recognize their gender identities and 'do gender' in climate change perception and mitigation action.

I chose qualitative methodology because it provides flexibility to address a problem or issue, besides assisting to gain knowledge on the perceptions of the individual participants living in a particular context (Creswell & Poth, 2016, p. 84). I used a phenomenological research design for this study. Phenomenological research attempts to explore the lived experience of individuals related to a concept or a phenomenon (Creswell & Poth, 2016) to develop a combined description of the essence of those experiences. For this study, gender and climate change are the phenomena in focus. Phenomenology is, therefore, an appropriate research design because I explore the phenomenon of climate change understanding through the experiences of university students.

It is essential to expose one's bias when exploring a given phenomenon. LeVasseur (2003) suggests that one should reflect on how to suspend the researcher's understanding and decide how to present the researcher's personal understanding in the study (Creswell & Poth, 2016, p. 130). In phenomenology, this is known as "bracketing", a strategy used in qualitative analysis to mitigate preconceptions that can impact the research findings (Tufford & Newman, 2012). Besides,

phenomenology is about lived experience. Having a similar background to half of my study participants could influence my positionality. So, before progressing to analyze the data, I have explained my own views and biases in section 4.7.

4.2 LOCATION OF THE STUDY

Though my study population consists of Bangladeshi and Norwegian university students, the interviews were conducted in Norway from August to September 2020. I chose to work with students living and studying in Norway for my convenience. All my Norwegian participants were in Bergen, and Bangladeshi participants were found in different universities of Norway located in Oslo, Vestfold and Telemark and Trondheim. Relating to my ambition to highlight the experiences of students of different backgrounds, it is important to consider that Bangladeshi students have a considerable amount of experience from living in Norway, which has probably influenced the way they reason around certain issues and gender in particular.

4.3 RECRUITMENT OF PARTICIPANTS

According to Creswell and Poth (2016), 5-25 participants are suitable for phenomenological studies, and I aimed to have 12 adult participants in total. Before my fieldwork, I laid forth a list of criteria to select the participants. Initially, the participants were to be either Bangladeshi or Norwegian students between 20 and 30 years old who are studying or have studied recently at the University of Bergen (UiB). I planned to divide the 12 interviews between the Norwegian and Bangladeshi students to understand different perspectives regarding climate change. Besides, I was focused on having an equal male-female distribution to reflect the gender aspects of the study. Therefore, I intended to have in-depth interviews of

- Six Norwegian participants (three male and three female students)
- Six Bangladeshi participants (three male and three female students)

Due to various circumstances, such as pandemic restrictions and the availability of the participants, I had to change some of the criteria. To the best of my knowledge, most of the Bangladeshi students found in Bergen were more than 30 years old and hence did not fit into my participant criteria. So, I have made a slight change and broaden the study area to consider any Bangladeshi students between 20 and 30 and studying in Norway. However, I had one Bangladeshi female participant who was 31 years old. As for Norwegian students, all participants were from the University of

Bergen and were between the age of 20 and 30, except for one male participant who was below 19.

As concerns recruitment of study participants, I posted my request of participation on different Facebook groups and pages such as Alrek Residents Group, Bangladeshi Students Union in Bergen (BSUB). I struggled a bit, but after repeated postings, I got five responses from three male and two female Norwegian students. Further, I also got one Norwegian female participant through one of the initial participants, i.e., by using snowball sampling. Snowball sampling is convenient as one participant provides referrals for the recruitment of others (Noy, 2008). It was harder than I anticipated to reach Bangladeshi students. Despite several postings, I was not successful in recruiting any Bangladeshi students. I thus decided to apply a different strategy. I sent messages explaining my thesis in two Facebook group chats, which I joined in 2019 to know about UiB admission and Nordic life. My first two Bangladeshi participants were recruited from one of those groups. One of these Bangladeshi participants was kind enough to help me and reach out to another female participant. He introduced other women who were willing to participate. However, only one of them fitted my criteria. To recruit a sufficient number of participants, I started sending personal messages to my friends and known people to help me out in reaching participants. In this way, ultimately, I managed to find a total of 12 participants with the intended male-female distribution from different study backgrounds. A synopsis of the participants is given below.¹

Table 1: List of participants in individual interviews with a pseudonym

Name (Female)	Age	Nationality	Name (Male)	Age	Nationality
Bani	25-29	Bangladeshi	Belal	25-26	Bangladeshi
Baishakhi	31	Bangladeshi	Basir	25-30	Bangladeshi
Beli	28	Bangladeshi	Biplob	28	Bangladeshi
Nina	26	Norwegian	Nils	18+	Norwegian
Nora	20-24	Norwegian	Normann	21	Norwegian
Nelly	22	Norwegian	Nick	27	Norwegian

¹ Age range has been included as it is culturally inappropriate to ask age in Bangladesh. So, participants who were uncomfortable with telling their age had mentioned their age within a range of some years. All the pseudonym for Bangladeshi participants starts with 'B' and Norwegian pseudonym begins with 'N'.

4.4 METHODS OF DATA COLLECTION

The process of data collection took place between the 5th of August and the end of September 2020. I used in-depth one-on-one interviews as the main source of data collection. Focus group discussions were initially intended to be an alternative data gathering method; however, this was abandoned due to challenges with recruitment and the current global pandemic situation.

4.4.1 Individual interview: According to Punch (2014, p. 110), interviewing is the most powerful way to assess people's experiences, perception, meanings and circumstances, and thus suitable for my research interest. This study employed a semi-structured interview guide (appendix 1 and 2) with open-ended questions to gather in-depth data and keep the focus on the perceptions of the informants. The semi-structured interview involves predetermined questions set by the researcher but with the flexibility of rewording the questions if necessary, seek clarification (Doody & Noonan, 2013), and explore new pathways that arise during the interview that might not have been considered at first (Gray, 2013). Thus, participants were able to freely discuss their perspectives, which were aligned with the study goals.

Initially, I planned to have face to face interviews. However, due to the pandemic, I experienced a number of challenges in the data collection process. People of my surrounding were affected by Covid19. Thus, I needed to take extra precaution and had to keep myself quarantined several times. Moreover, participants were in distant places, and both the participants and I were not feeling safe with the in-person conversation. Considering the pandemic situation and safety issues, I had to compromise with face-to-face interviews and rely on a virtual platform. However, I had three face to face interviews that took place at UiB premises and Sammen student housing in Bergen. The other interviews were conducted via zoom video call. I chose 'zoom' as it maintains end to end encrypted data, which ensures security and privacy. Besides, it is free of charge and provides a recording feature. I took notes in my diary during and after each interview. I followed unstructured observation during the interview, which is a more natural way to observe the behavior of the respondents without interrupting or influencing the answer (Punch, 2014, pp. 119, 120).

All twelve participants agreed to have their interview recorded. I used an audio recorder for a face-to-face interview. Zoom recording tool was used after I had participants' consent to record. All my participants were friendly, enthusiastic, and engaged in the topic of climate change. The interviews ended up lasting from 80 to 120 minutes. Moreover, all the interviews were conducted in English, except three that were done in Bangla and translated into English by me.

4.5 ETHICAL CONSIDERATIONS

4.5.1 Overall ethical issues and data management

Ethical challenges arise in all designs, approaches, and at any phase of a project (Punch, 2014), and thus I considered the ethical issues from the stage of preparing the research question to conduct the interviews and data analysis. Moreover, as I conducted research with informants from different genders, countries, and religions, I paraphrased questions and tried not to cause conflict or harm their values or influencing their opinions during my data collection. For example, I was particularly careful when addressing food issues with my Hindu participant because it is not culturally and ethically acceptable to ask about beef consumption to a practicing Hindu as having beef is forbidden in Hinduism.

The project is registered in RETTE, UiB's own system for project management. Moreover, I sent my research proposal explaining my study, data collection process, interview guide, consent letter to the Norwegian Centre for Research Data (NSD) and applied for approval in line with Norwegian legislation of data protection. The data collection process was started in August after NSD authorization (appendix 5), and an audio recorder and password-protected laptop were used for collecting and processing the information. All data files generated throughout the research were stored at the UiB SAFE system using the VPN (virtual private network) connection, and only my supervisor and I had access to the data. Furthermore, all the recordings will be deleted at the end of the study.

4.5.2 Informed consent

All the interviews have been conducted with adults based on their informed consent. Informed consent is usually a written statement explaining aspects of a study to participants and requesting their voluntary consent to participate before the study begins (Neuman, 2014, p. 151). The requirements (Mackenzie et al., 2007) of informed consent should be adhered to by informing participants about the intention, methods and benefits of the research and also ensuring the informants' voluntary participation.

Due to the pandemic, nine out of twelve of my interviews were conducted by using the digital platform 'zoom', which comes along with inbuilt encrypted features. Before starting the interview, I had a general conversation with all my participants regarding the thesis and describing why they had been selected. Then I sent the informed consent letter (appendix 3) to the participants a day before the interview and requested them to read it. I explained my identity, the whole research

purpose, and the data management process, as well as participants' rights. I ensured their oral consents and recorded them at the onset of interviews. Digital participants were encouraged to sign and send back the consent letter, which six of them did. Besides, written consent was taken in the three physical interviews.

4.5.3 Confidentiality and anonymity

Confidentiality (not revealing any data gained from an interviewee intentionally or coincidentally in manners that may recognize a person) (Wiles et al., 2008) and anonymity (ensuring that the participants or respondents remain nameless or anonymous) (Neuman, 2014, p. 154) are two different issues for ethical consideration. Anonymization in this study was required to protect the participant identity as well as to comply with data protection obligations. In my case, I used a pseudonym for each participant to protect their anonymity without changing the original data given by the participants. Hence, the reader should not be able to recognize any of the study participants. Furthermore, the name and other identifying characteristics such as their specific study subject were not included in the transcription and in the thesis findings.

4.6 TRUSTWORTHINESS OF RESEARCH

It is essential to establish trustworthiness in any study, that is, to ensure that your research process and findings are legitimate (Skovdal & Cornish, 2015). The trustworthiness of the qualitative research relies on credibility (the extent to which the findings are believable) (Bryman et al., 2008), dependability (data stability over time and conditions of the study), transferability (the extent to which findings are worthwhile in other settings) (Connelly, 2016) and confirmability (that the results of the analysis are rational and data-based) (Yilmaz, 2013).

4.6.1 Credibility

Credibility refers to whether the study participants consider the findings of the research valid or credible (Yilmaz, 2013, p. 9) and to what extent the study's methodology and analysis are deemed to be reliable by the readers of the study. Also, credibility works to establish whether the results of the study are reliable relative to the results of other research. I intended to provide credibility by adapting previously well-established research methods. Therefore, I looked into the methodological set up of other phenomenological studies, as this gave me a firm idea of how such research progressed (Shenton, 2004).

Providing a thick description of the study, such as explaining and describing the context and situation, study design, or methodology of the research, assists the reader to understand the findings (Punch, 2014; Shenton, 2004; Tracy, 2010; Yilmaz, 2013). Hence, I tried to deliver detailed descriptions of the research process and choices made to safeguard the credibility of this study. Besides, "member checking" (Cope, 2014) had been employed throughout the study to ensure credibility. This is a verbal verification approach that allows participants to validate the researcher's interpretation. I always requested the participants to explain with examples to have a better understanding. Moreover, I made concise explanations of informants' accounts during data collection and asked them if I had interpreted them accurately. Also, I offered them the chance to correct me if I had misread their statements.

4.6.2 Dependability

Dependability assesses the consistency of the research procedure (Yilmaz, 2013) and evaluates whether the findings are compatible with the raw data. Shenton (2004) further suggests representing clear and well-detailed explanations of the study design to ensure dependability. An interview guide was prepared before the data collection, and all the interviews were conducted by following the same questions. Most of my interviews were conducted by zoom video call, and the interviews were recorded with participants' consent. Thus, I was able to observe the participants as well as listen to them while transcribing from the original video conversation.

In attempting to meet the dependability criteria, I have provided detailed information regarding the purpose of the study, study design, selection of participants, methods of data collection, management of data and data analysis. The detailed information may provide the reader with an idea of how the research happened. Moreover, several review discussions on the transcripts and progress with another individual (my supervisor) enhance the dependability of the study.

4.6.3 Transferability

Transferability refers to whether the results can be used or applied to other similar settings (Yilmaz, 2013) or if the study can be found or linked to established literature. A thick description of the context of the research, as mentioned by Punch (2014, p. 160), is utilized to ensure the transferability of this study. My study is inductive research concerning both climate change and development practices from a gender perspective. I believe this study can assist in underlining how gendered perception of climate change as well as climate action varies in the context of different social settings among the young university students from two countries of the global South and

global North. However, this is a small study in which one cannot be confident that the findings will be transferable to another setting. Hence, further research on the topic is required to increase transferability.

4.6.4 Confirmability

Korstjens and Moser (2018) argue that confirmability relates to the degree to which other researchers could validate the results of the research report. They further argue that confirmability is concerned with determining that the evidence and analysis of the findings are not personifications of the inquirer's intuition but rather explicitly drawn from the data. Hence, to ensure confirmability, I emphasized the interpretation process strongly during my data analysis and tried to provide a comprehensive description of every step taken from the beginning to the end of the study. Moreover, I have taken enough time to transcribe and translate the recording correctly. After each transcription, I double-checked the transcription with the audio. I also kept the audio file throughout the study and listened to them when I felt any confusion.

4.7 ROLE OF THE RESEARCHER

As human beings, we have an affinity to anticipate our preconceived ideas and experiences (Reiter, 2013, p. 9). Positionality has an impact on data generation and analysis (Jakobsen, 2012). My motivation for undertaking this study came from my previous study background and research experience in the environment. Also, I grew up seeing the consequences of climate change in Bangladesh. Being a young global citizen, I felt some kind of responsibility towards sustainability. I was curious to know how other young people from different countries think about this global concern and how they take part in climate action.

Social and cultural influences play an essential role in a researcher (Barrett et al., 2020). I intended to consider whether any preconceptions I had about the phenomena would influence my understanding of findings. As I shared the same social background and environmental hazards, I feel closely connected to the experience of Bangladeshi participants, and this is where I need the most to perform 'bracketing'. My positionality may create a bias on the analysis of climate change perception, but I strived to be conscious of my biases, experiences and values while doing data collection and analysis and also explicitly reflect on my biases while interpreting the findings. In terms of power imbalances, I did not get the impression that the participants felt any inferiority in relation to me, as all the participants are university students like me and mostly my age.

4.8 DATA ANALYSIS FRAMEWORK

In the data analysis process, I used the NVivo program following the thematic network model as recommended by Attride-Stirling (2001). I carried out the analysis in three stages with six steps as described by Attride-Stirling (2001).

The first stage was the reduction or breakdown of the text. After transcription, I dissected the data into meaningful and manageable text segments by the coding framework to reduce the data. Then, I abstracted themes from the coded segments by rereading the codes to identify the underlying patterns and structures. After that, I abstracted themes from these codes and constructed thematic networks by assembling the theme into basic, organizing and global themes. The second stage of the data analysis was text exploration. In this phase, I described and explored the themes and provided a summary of the thematic network, which reflected the general experience of the participants. Lastly, in the final stage of integration of exploration, I presented the analysis by writing the thesis report through my theoretical framework and answering my research questions.

5. UNDERSTANDING CLIMATE CHANGE AND CLIMATE ACTION

This chapter looks specifically at how the participants experience climate change and its effects. In addition, their understanding of climate change causes, mitigation action and sources of climate education will be explored. One-half of the participants are native to Bangladesh, and the other half are native to Norway. The participants' responses will reflect this difference, and this chapter will also focus on the similarities and dissimilarities in their understanding. This chapter aims to comprehend the participants' climate change perception and actions concerning climate change. In addition, it will explore whether these actions and perceptions reveal any gendered differences.

5.1 OBSERVED CHANGES AND EFFECTS OF CLIMATE CHANGE

At the beginning of the interview, participants were asked to talk about the natural changes observed in recent years, and the most common responses pertained to issues of high temperature, seasonal changes, natural imbalances, and climate events. Natural imbalance happens when a natural or anthropogenic activity disrupts the natural equilibrium of the environment, and it can cause biodiversity loss, ecosystem degradation and deforestation. Bangladeshi and Norwegian female participants shared their experience in interviews concerning natural imbalance. When Baishakhi was sharing her childhood memory in Cox's Bazar, one of the largest sea beaches in the world, she said, *"I used to go for a walk at Cox's Bazar sea beach with my grandfather. There were lovely shrubs and creepers around, but I never saw those things a lot when I grew older. They were very few. Maybe because of the increasing number of people and hotels"*. Baishakhi's observations highlight how, over the years, urbanization and tourism in Cox's Bazar have significantly increased, and for her, the visible manifestation of these was in the loss of shrubs. She believed that urbanization and population growth near the beach areas is ultimately responsible for biodiversity loss. Baishakhi, in a nostalgic and remorseful tone, expressed that *"This change had a very strong impact on me"*. Nelly, from Norway, had also experienced a natural imbalance in her home surroundings. She stated, *"...Now I can't turn a single direction without seeing just rows and rows of windmills, which is hurting the animal life there and the birds nesting. Windmills create a huge sound, so they scare away the deer"*. Nelly was aware that wind energy is viewed as a sustainable alternative to oil and gas in Norway but was still disappointed because wind power,

according to her, ruins wildlife, deters birds nesting and causes sound pollution. Both Bangladeshi and Norwegian female participants repeatedly mentioned the changes in plants and animals. They considered that development activities such as industrialization, urbanization, and even climate solutions like windmills to be causing natural imbalances. Additionally, one of the most common issues participants are dealing with is temperature changes, more common for Bangladeshi participants than for the Norwegian. For instance, Bani expressed, *“The weather or temperature has been very high in the last four or five years... Shifting from moderate to high temperature is the most noticeable change”*. All other Bangladeshi students, both male and female, shared the same sentiment concerning increased temperature and climate change. In contrast to Bangladeshi students, Norwegian students' experience with changes in weather conditions is more diverse. For instance, Normann stated,

“I have noticed that one year, it was particularly hot in Stavanger and all of Norway; it's around 30 degrees during the summer and for an extended period, but next year, it is 10 or 12 degrees... This semester I have noticed snow in May”.

For Normann, climate change in Norway has created a temperature imbalance. He has experienced unusual temperature fluctuations. Also, Normann and other students witnessed snow in May, which was an unexpected sight as it is uncommon that cold weather reaches the point of snowing in the spring in Norway. Bangladeshi participant Beli also discussed colder weather and expressed, *“Winters were definitely different when I was a child... Now the winters are shorter but definitely colder than they used to be; people are dying in North Bengal... Rainy seasons are also getting longer, and flooding is more prominent than it used to be”*.

Beli explained that climate change causes the season to gradually change throughout the years and reflected how the changes caused natural calamities like floods. A similar opinion was also given by Belal when he was talking about the effects of climate change in society,

“Bangladesh was a country of 6 seasons where we could produce crops within every two seasons... Due to the long rainy season and extended flood, the cultivable lands remain underwater and becoming unfertile. So, people dependent on agriculture are moving towards the city, more specifically, to the slum”.

Bangladesh is an agricultural country with visible seasonal variation, and crop cultivation primarily depends on the season, so changes in the season caused by climate change negatively impact agriculture. Thus, Belal highlighted frequent disasters and explained how the consequences

of disasters or climate events are related to livelihood and migration. As the current young generation in Bangladesh grew up seeing climate change, most students shared Belal's perception. Similarly, concerning rising temperature and seasonal changes, Beli brought the occurrence of dengue fever into the light,

“Last year, Bangladesh faced the biggest dengue surge... and the death rates were high. This is definitely due to climate change; the monsoons are getting more vigorous. There are more dirty waters and collections of waters around the households... Also, the temperature affects mosquito activity; for example, the Aedes mosquito gets hungrier during hotter summers. So that's when they actually spread, reproduce and feed on blood more than ever”.

The number of dengue cases in Bangladesh confirmed in 2019 is almost double the average in the last 19 years reported as a mosquito-borne disease (Ahsan et al., 2021). Beli has been working as a health researcher and explained how temperature and seasonal changes influence vector-borne diseases and cause health effects. Biplob, on the other hand, reflected on his own change due to climate change.

“Major changes came in my habits and everyday life due to climate change... The way we used to prepare for different seasons, especially for foods and clothing, has changed. For example, last year, we had untimely rainfalls in the winter season. So, I definitely was not prepared for that...”

There are six seasons in Bangladesh, and each season has its own natural characteristics, which are connected to Bangladeshi food habits and cultural activities. Climate change has changed the characteristics of the seasons. Biplob indicated how those impacts are affecting his personal life and bringing changes in his personal habits.

Norwegian students explained the social and personal effects of climate change differently from Bangladeshi students. Nelly completed two years of her high school in India, and thus, she compared Norway and India, *“I feel like Norwegians don't really understand. We don't get the effects of climate change; we just get a warm summer... People just loved it”*. Her tone expressed her disappointment towards Norwegians' understanding of climate change. She argued that climate effects in Norway are not extreme but rather comforting. On the other hand, while talking about the social and personal impacts of climate change, Normann, who lived his whole life in Norway, said, *“...Around my environment, I haven't noticed that much because I don't think Norway is part of a place [world] where you see differences”*. This is particularly interesting because participants from both countries mentioned experiencing shifts in season, but Norwegian participants did not

observe any change or impact upon their society. Normann, who previously shared his observation on temperature fluctuation, emphasized geographical location during the discussion on climate change impacts in his personal life and society. His opinions indicated that though there are slight changes in the environment, these changes do not impact his personal life or society. However, almost all noticeable observations made by Bangladeshi participants' concerns increased the frequency and intensity of damages caused by natural disasters such as floods, cyclones, and drought. Baishakhi shared, *"Floods and cyclones are more frequent and destructive than before. There would probably be one or two cyclone attacks within five years in my childhood"*. Baishakhi compared the frequency of disasters occurring over the years, highlighting how climate variability and weather extremes are now becoming a common phenomenon. However, none of the Norwegian participants talked about natural disasters. This could be because Norway is geographically located in a part of the world that is not very much affected by climate change-induced disasters, as said by Normann.

Participants easily recognized environmental changes, but biodiversity loss in the environment is an issue that was identified only by female participants from both nations. Bangladeshi participants' observations were seemingly more insightful than the Norwegian participants, but this could be because of their frequent and more intense climate experience, as indicated by participants. From the above findings, one can conclude that geographical location and the type and intensity of particular climate events play a vital role in observing and shaping participants' understanding of climate change effects and natural changes.

5.2 CAUSES OF CLIMATE CHANGE

Several causes for climate change were highlighted during the course of the interviews, in which almost all the participants emphasized unsustainable development being an important factor. Industrialization, mass production, urbanization, overconsumption, and population growth were the major stressors of unsustainable development that appeared in the interviews. For instance, Nora contended,

"The roads and houses built in Norway contribute to climate change because when you break down ecosystems, you break down climate... The capitalist system unsustainably uses the earth's resources. The way we have been using and exporting oil in Norway is one reason for climate change".

Like Nora, Belal also stressed unsustainable consumption and production, “...*The primary reasons are rapid industrialization and unplanned urbanization. We emit carbon by manufacturing loads of agricultural, consumer and luxurious goods*”. Nora and Belal were among the participants who agreed that unsustainable urbanization and industrialization are significant contributors to climate change. Nora correlated urbanization and industrialization with ecosystem imbalance by mentioning ecosystem breakdown and unsustainable resource use. Adding to that, Belal argued that mass production is causing carbon emission, and Biplob further explained how industrialization is causing climate change, “*A considerable amount of smog and waste materials are being produced by rapid industrializations that cause environmental pollution, specifically air pollution and degrade the ozone layer*”. While Belal and Biplob focused on the dangers of greenhouse gas emissions for climate change, Baishakhi blamed overpopulation; she stated, “*The fundamental reasons are deforestation and then overpopulation... The environment or ecosystem is damaged by overpopulation*”. Most Bangladeshi participants agreed with her because, in Bangladesh, deforestation is a common practice to meet the housing demands of their growing population in an already overpopulated country.

All the participants attested that climate change is real, anthropogenic, and unfolding before their eyes. The overall interview reflection did not show any gender differences in participants’ understanding of climate change causes.

5.3 CLIMATE CHANGE MITIGATION

The students discussed different approaches to tackle climate change from a local and global perspective. Being raised in two different geographical and socio-cultural locations, viewpoints on local climate change mitigation strategies differed between Norwegian and Bangladeshi students. Norwegian female participants Nina contended, “*We need to think about how we live our lives. Not just what we use and what we buy but also how we commute*”. Her statement did not refer to any particular task but rather focused on a sustainable lifestyle. She argued that every decision from consumption pattern to transportation choice is important in daily life to locally tackle climate change. Beli gave a more concrete example, “*We should start using paper bags rather than plastics and polythene. Then installation of trash cans and put a small fine on people if they are littering...*” Beli prioritized plastic consumption and waste management. Though the two participants had different opinions on local climate action, their solutions were based on individual

lifestyle choices, something which most of the other female participants also mentioned. Norwegian participants agreed that their biggest concern is oil extraction. Nora shared her opinion on this matter, “...*Stop drilling for oil in Norway and start investing our money in the green industry and assign our scientists to develop solutions and all our engineers to make energy from sustainable sources like waves, sun and wind*”. Nora and most Norwegian participants agreed that the best way to tackle climate change in Norway would be to stop oil extraction, even though Norway is one of the world's largest oil exporters. However, Normann, a student of political science and right-wing politics supporter, had a different opinion on oil mining in Norway:

“Everything that we are making or producing comes from the oil sector, and oil is addressed as a major problem to solve climate change problems. If you remove oil companies, you will have trouble with workplaces, bankruptcy; even living in Oslo will be unaffordable, and people don't see the effect. Considering all the facts when you say oil is problematic, I think you are making another problem and just trying to blame someone instead of finding a solution to the problem”.

Normann demonstrated the consequences Norway would face if the country stopped oil mining immediately, and he clearly seemed to support oil extraction. Interestingly, he is the only participant who favored oil despite knowing the negative impacts of oil on climate.

As seen above, Bangladeshi participants mentioned overpopulation as one of the causes of climate change, and they became vocal on population control as a mean to fight climate change locally. Like other Bangladeshi participants, Baishakhi said, “*Population control is a must; then education but educated people are not always environmentally concerned, but media or campaigns can raise their awareness*”. Baishakhi reflected on two major issues Bangladesh faces: overpopulation and illiteracy. However, she seemed frustrated with educated people and also indicated that education, along with environmental awareness, can help to mitigate climate change. At the same time, Basir cited awareness from a local and global mitigation standpoint,

“Countries in global North and industrialized nation, and who are depleting the environment, like Norwegian, they need to put their awareness into action. Norwegians, even people in Bangladesh and America, are aware of climate change, but they are not putting their awareness into action”.

While Baishakhi focused on raising awareness, Basir argued that awareness will not help if people are not taking any action. Besides, like other students, he also indicated that despite holding a greater share of climate mitigation liability and responsibility than developing countries, developed countries or people are not taking proper actions. Additionally, male participants

mentioned tackling climate change globally. Normann shared, *“Carbon emission should be reduced to comply with the Paris Agreement (PA)”*. In a similar vein, Bangladeshi participant Belal contended, *“There are some global plans like SDGs or other UN objectives. We should be strict while implementing the rules and regulations of such global or local programs”*. Participants from both countries mentioned global agendas such as the PA, SDGs and UN objectives, which indicated that they were informed about global mitigation plans, and these agendas were meaningful to them. However, Biplob raised his point on the 'one fits all' idea and argued that people must realize that climate change mitigation interventions should not follow any particular solution, *“Local and global initiatives should be different. There are some global actions, for example, reducing carbon footprint and usage of fossil fuel. Local actions should be taken based on community, vulnerability, and ecological factors”*. When discussing global climate change mitigation, Biplob mentioned the need for different mitigation initiatives depending on the community's vulnerability.

Participants' local and global mitigation approaches reflected their in-depth knowledge of climate change. Interestingly, only male participants talked about global agendas, which could mean that the male participants see the need for policy initiatives as more important for mitigating climate change. All participants believed that personal choices contributed to climate change, but only female participants highlighted individual action as mitigation initiatives, indicating that female participants may be more willing to incorporate changes in their personal habits to participate in climate action than male participants.

5.4 SOURCE OF CLIMATE CHANGE EDUCATION

In order to understand students' perception and knowledge of climate change, they were asked to explain how they stay updated on this matter and their first source of climate change education. This will help to understand how their first contact with climate change information encouraged them to change their actions and assist in climate mitigation.

5.4.1 The first source of climate change knowledge

Some of the participants argued that education shape climate change perception. The common notion is that if people receive proper and equal education, climate change understanding should be similar irrespective of gender. Belal reflected on this, *“The source of climate change knowledge is open for all genders, so understanding should be equal. If the education level is similar, then*

understanding should be similar between male and female". Belal emphasized the open accessibility of the internet, which he mentioned as *"source of climate change knowledge"* but he also highlighted the institutional schooling of a person by saying *"education level"* to consider climate change understanding. Interestingly, when discussing the issues of the first climate change education source with Bangladeshi and Norwegian students, they all confirmed that institutional education, i.e., the school was the common place to know about climate change. For instance, Bangladeshi student Baishakhi gave the following response, *"I've learned the basic of climate change from our school textbooks. The social study book has always mentioned the adverse effects of disasters"*. Biplob, in addition to speaking about school textbooks, also mentioned family as his climate education source, *"My first source of climate learning is my father, who is an environmental researcher. I used to read his publications and research"*. In Bangladesh, the primary school textbook includes pre-disaster and post-disaster activity lessons. The basic climate change education begins from high school (standard six), and the depth of climate change lessons gradually increases in each class. Climate change education in science and social study subject is mandatory for all school students in Bangladesh. Hence, it is no surprise that Baishakhi and other Bangladeshi students mentioned school as their first climate change education source and cited natural disasters' effects and adaptation. Additionally, Biplob shared how he learned about climate change from his family, revealing the importance of family to a child's climate education. On the other hand, Nora shared the following statement,

"I learn about climate change mostly from the 'Nature and Youth' organization. Also, a little in school, but it was not engaging. I didn't get it. It's more technical and scientific and not like this concerns you! More like this, 'Oh yeah, this is happening somewhere in the world, and Norway maybe has some part in it because of oil'".

Similarly, Normann also agreed with Nora's argument, *"Climate change was not an issue in my school. It has now become part of a little bit of a subject in school. Greta Thunberg and others pointed out the importance, and the government sees that now"*. Nora and Normann are the almost same age, and the recounting of their school experiences clearly showed that the lessons in their school were not as engaging as they should have been. Moreover, it is evident from the statement of Nora that she did not understand the intensity of climate impacts as the lessons were primarily factual and complicated. The claim of Normann about the recent emphasis on climate change education in school was supported by Nils, who recently completed his high school education,

“We had a lot of it [climate change] in high school. There were many protests, online and forum discussion in the news. Greta Thunberg was so vocal about her meaning last year. So, the last year of my high school experience was focused on climate change in all subjects and reports. I see that the teachers are going to implement this more for the students that come after me and at an earlier age. So that will hopefully be a lot of good education for those kids”.

While other Norwegian students were frustrated about their previous education curriculum, recent high school graduate Nils had a different view. Conversations with Nils and Normann indicated that climate change is now more prioritized in Norwegian schools than in previous years. Both Nils and Normann emphasized Greta Thunberg and her contribution to climate change education positively in the Norwegian education system. Nils displayed a positive approach to the current Norwegian school program, which encourages students to understand climate change from an early age.

The findings show that though school was the first place where almost all participants learned about climate change, it seems to have had a weak influence on their mitigation behavior. However, a few students also emphasized environmental organizations and their family's contribution to their climate knowledge as important sources of climate education.

5.4.2 Current education sources and the role of media

The media, such as news channels and social media platforms, are currently the leading sources for climate change information for the participants. All participants cited social media as their current source and discussed the positive and negative effects of media. Biplob had the following to say, regarding this issue, *“The biggest source of climate change information is social media, especially Twitter. I follow Twitter because it gives the most authentic information...”* Similar statements were found from other participants. Biplob also shared his opinion about social media's role to spread climate awareness among the young generations,

“Obviously, today's world is more connected to social media... And over 70% of young people use social media in this world right now. Since it is a channel with the strongest user base, I think those who want to spread information or take actions against climate change using social media will be making a practical impact”.

Due to the prevalence of participants discussing the impact of social media as an education source, it was important to investigate whether social media was a source that encouraged eco-friendly behavior. Participants were asked to explain how social media helped them to follow climate

mitigation strategies, and eventually, students shared examples from their own lives. For instance, Biplob shared,

“Recently, I found out my carbon footprint through an online calculation, and it was not satisfactory to me. So, I have decided to decrease my carbon footprint and started riding a bicycle [instead of the public bus] to commute to my university or other places”.

Biplob revealed how online media is incorporated into his life and helps to maintain and monitor sustainable behavior within his capacity. Not only Biplob but other students also spoke about their changed behavior due to different social media. Nora is a climate organization member and explained how she had been motivated to act eco-friendly, *“I guess a lot from the 'Nature and Youth' organization and social media because I follow many climate accounts, and then I get affected to act eco-friendly in my daily life. So, I guess social media affects [me]”*. Nora referred to social media as a hub to gain climate change information and take sustainable action. Listening to Biplob and Nora, it was quite evident that social media could positively influence individuals with regards to their climate change perception and encourage them to take mitigation action. Yet, while most students focused on the positive effects of media on climate change understanding, a few students stressed the negative impacts of media; for instance, Nils contended,

“I think the newspaper had done it the wrong way when we protested in high school. We took days off from school, and the news then went, ‘Oh! The students don't come to school because they're gonna protest’. It was so negatively written that I almost felt sick from reading it. So, if they become more objective or be neutral in the statements, that can help a lot better. They are more focused on us being in school and getting our jobs, which is so stupid! We will not have those jobs or those opportunities if the earth falls out of the sky”.

Nils was talking about the international school movements commonly known as ‘Fridays for Future’, started by Swedish girl Greta Thunberg, where students skipped classes on Friday to protest against climate inaction by political leaders and the fossil fuel industry. His previous statement was about the unfair way the media covered the news on the student protests. He used the metaphor *‘the earth falls out of the sky’* to signify the consequences of climate change catastrophes. Nils's experience with the media negatively impacted his emotions but also showed that it could have played a positive role if the news were conveyed accurately.

Media and social media, in particular, are the key contributors in shaping climate knowledge and encouraging sustainable behavior for the participants of this study. However, a few participants

also reflected on the negative impacts of media, which again indicates that media has significant importance in representing climate change.

5.4.3 Influence of political parties

Bangladesh is a parliamentary representative democratic republic where the government exercises executive power. The Norwegian government is a parliamentary democratic constitutional monarchy, and the executive power is vested in the cabinet, the state council and led by the Prime Minister. Though Bangladesh and Norway both are democratic countries, the political structures are very different. Students were asked how political parties would inspire the young generation to behave sustainably. Students shared their experience based on their own country. Bangladeshi student Bani expressed the following views of political parties, *“Political parties have a big role to play in Bangladesh because even though most Bangladeshi are not well educated, people have some knowledge and awareness about political parties. So, they can make a huge difference if they want to”*. Though the Bangladeshi government has come far in developing commitment to climate change adaptation programs, still corruption is the first point brought up when students talk about the government or political parties of Bangladesh. After expressing an optimistic opinion about the acceptance and influence of political parties by the mass people, Bani said *‘if they want to’* by which she was possibly referencing the corruption and unwillingness of the political parties to take sustainable action in Bangladesh. Surprisingly, Nora claimed that the Norwegian government's attitude is similar to Bangladesh. She said with frustration, *“Norway has a responsibility. And I think that should be just like, ‘Of course!’ But it's not. And that really sucks”*. By saying, *“of course!”* she seemed to believe that the attention to climate change by the government should be more dedicated. She showed frustration with politicians as, according to her, they do not give much importance to climate change. Additionally, Nelly, who previously mentioned windmills, added to the discussion by again pointing out the disastrous effect of windmills and political tensions, *“I really like the political party MDG which is the environmental party in Norway. They don't agree with the windmills, but people assume it's their idea, and they are the ones that put them [windmills] up. In reality, it was Høyre [centre-right party] because the green party didn't even want them, they're like, ‘No, that's not the best option, there are hundred other better things to do, it's the stupidest thing to do’. I feel like other parties can blame this thing on the green party like, ‘Look what they've done. All these ugly things are everywhere, they make a lot of sounds...’”*

Nelly continued by expressing her support for MDG, the Norwegian Green Party, which has environmental and ecological sustainability as the number one cause on their agenda. She refuted the claim that the green party established the windmills and demonstrated why people misinterpret and accuse the green party. Her statement clearly reflected the current political debate in Norway regarding sustainable energy solutions. She continued saying, *"Windmills do make a lot of sounds, and it's not the best thing, but it's better than oil."* She is the only participant to associate political parties with windmills. In a nutshell, participants from both countries agreed that political leaders or politics can influence people in sustainable action; however, they found that there is a lack of willingness to address climate change through policy or legislation among politicians.

5.5 CLIMATE ANXIETY

In this study, climate anxiety refers to the stress or anxiety associated with the threats of global climate change and natural catastrophes. Students, in general, agreed that young people are more aware of climate change than the older generation. So, students were asked if younger generations are more climate anxious than older generations, and the answers were quite interesting. For instance, Nelly gave the following response, *"The younger generation has always been worried about their future. It was the cold war in the '80s and was always this and that thing.... We're frustrated that the older generation doesn't care, especially the 50-60 years old politicians"*. Similarly, Basir contended, *"Young generations have the exact information, and we can feel the change. So, we are more anxious, and we see a future that is not a very good one"*. From the answers of Basir, Nelly, and most of the other participants, we understand that the young generation is anxious because of their uncertain future due to the effects of climate change. During the interviews, Norwegian participants commonly showed political disappointment, as shown above. Belal had a different viewpoint and said, *"A person cannot think of climate change when his own career is full of uncertainty."* He did not relate anxiety among young people to climate change but more to their career. He indicated that due to the prevailing unemployment rate and lack of opportunities, young people in Bangladesh rarely can think of climate change as a threat to their future; rather, they are more worried about their own uncertain career. Belal continued his assessment by saying,

"After the war of 1971, the older generations were mostly illiterate; these people worked hard to build the nation and couldn't think beyond that. They probably have heard about climate change

from TV and newspapers, observed the gradual changes, but they are not aware of the alarming situation”.

Both Nelly and Belal stated that older generations were products of their time where political tensions and the country building was their most important concern and not climate change. Hence, the older generation is not as anxious as the younger generation. Some Bangladeshi students denied this claim, however, and shared a different standpoint. For instance, Biplob said,

“I feel like the older generation is now more conscious because they have experienced the changes throughout their lives, which helps them to think and focus on the changes. Older people inherently feel some responsibility towards the development of society and their future generations... The young generation is aware and anxious about climate change, but I don't think the young people in Bangladesh are properly motivated [in climate action] due to the absence of an engaging atmosphere. I don't think they get the incentives like the older ones already have”.

The participants hold mixed opinions about climate change anxiety among the young and old generation. Bangladeshi participants reflected that young people in Bangladesh have other priorities that make them less worried about climate change than about securing a future job, whereas, according to the participants, gradual natural change observation drives the Bangladeshi older generation to be anxious about the environment. On the contrary, Norwegian students, in general, claimed that older generations are less anxious and more careless than the young generation.

5.6 INDIVIDUAL CLIMATE ACTION

While the previous findings precisely focused on climate knowledge, this subsection will discuss participants' climate action. To understand individual climate mitigation strategies, students were asked to talk about their food intake, transportation choice, waste management, power, and clothes consumption. Considering the study findings and relevance of the study objectives, climate actions associated with food, clothes, and transportation were prioritized and chosen to be discussed in this study. In addition, the study also needed to focus and limit the discussion around gender and climate change. Students reflected on their own individual consumption and also revealed the association between climate action and gender. This section will focus on participants' individual food habits and transportation choices without much emphasizing gender. Clothes consumption

will be discussed elaborately in section 7.3.3, which concentrates on gender with regards to climate action.

5.6.1 Food habits

In general, participants demonstrated an awareness of how the meat industry might lead to climate change and the vegan diet's environmental advantages. However, when they were asked to talk about their common food at dinner and lunch, Bangladeshi male participant Basir contended, “...[My] common food; beef and chicken”. Similarly, Norwegian male participant Normann stated, “*I often have red meat in dinner meal, at least 3 to 4 times a week*”. Common food mentioned by men was mostly meat. On the other hand, women seemed to have different types of food on their everyday menu. Nina, like other Norwegian female participants, said, “*I eat a lot of pasta, soup and try to use vegetables, eggs, beans and lentils*”. Bangladeshi female participant Baishakhi stated, “...*I prefer fish to vegetables... People who follow Hinduism do not have beef; even many of them are vegetarian... Hence, I never had beef. I even eat less meat after knowing the impact of meat consumption on the environment*”. In general, most of the women mentioned having vegetables and pasta for lunch and dinner. However, Baishakhi follows Hinduism, and thus beef is forbidden for her. In Hinduism, the cow is respected, and most Hindus refuse beef as cows are regarded as a motherly species. Moreover, her entire diet is shaped by her religious belief, which she further explained by saying,

“I used to have 'Ekadoshi', which is a religious fast. I only had fruits on those fasting days. I never saw my brother or any men having much interest in fasting. My brother loves meat and cannot go without meat. No matter how modern we are, Hindu girls never dare to eat beef. However, if I talk about men, they always end up trying beef by their friends' influence. I think men are more interested in eating meat than women”.

'Ekadoshi' is fasting prescribed by Hinduism, which is kept twice a month to please God and Goddesses. People should only have fruits and water during their fasting periods. Baishakhi, considering the religious aspects, argued that Hindu girls are more prone to stick to their beliefs and not try beef than Hindu men. The gender differences apparent here will be reflected more in chapter 7. However, just like Hinduism, other religions also influence diets, and this was evident in the cases of other Bangladeshi participants. Bangladeshi Muslim participant Basir said, “*I eat halal food. So, I don't have many options*”. Similarly, Biplob contended, “*Because of my culture and religion, I try to look for halal chicken... I am kind of accustomed to having Bangladeshi*

cuisine". Bangladeshi Muslim students such as Basir and Biplob strictly consume halal food. Halal meat is guided by Islamic religious criteria concerning how livestock are fed, raised, and slaughtered. Not only religion influences food choices, but culture also does as well. For example, Baishakhi expressed, *"I only know how to cook my continent's cuisine, so I choose only those foods"*. Compared to Bangladesh, Norway has less food variety. Also, foods that Bangladeshi students are accustomed to are not widely available in Norway. As mentioned by Baishakhi and Biplob, Bangladeshi students buy ingredients familiar to them from Bangladeshi cuisine. So, cooking skills, religious belief, and culture impact these individuals' food habits.

To have further in-depth knowledge of potential eco-friendly food choices, participants were asked to list their preferences while buying and choosing food menu and whether they consider the climate or carbon footprint when purchasing food. None of the participants reported being vegetarian. All participants were students, so one of the most common factors influencing their food purchases was price/cost. Belal's statement on food choice portrayed most other study participants opinion. He said, *"I mostly go for cheap foods"*. Besides, cheap food options, Nora contended, *"... Price because I'm a student. If I had more money, I'd probably live and eat more sustainably. Sustainably means eat meat that is produced in Norway..."* Students were mostly self-funded and thus conscious about the food price, which was well reflected by both Bangladeshi and Norwegian participants. At the same time, Nora reflected on her willingness to choose sustainable food. She indicated that her financial condition was the main reason that she was not completely sustainable in her food choices. Similarly, Nina also tried to be eco-friendly by having local food; however, she found it hard because *"It's difficult to buy locally [produced food], or it's very expensive"*. So, whenever students were discussing food, their choices revolved around the cost. Like Nina, Nora also reflected on local food, *"I like beef, but it's expensive. I do not eat meat if it comes from South America or Central America because I know it has a huge effect on the rainforest"*. From Nina and Nora's conversation on local food, it was evident that they were aware of the fact that consuming local foods may help to mitigate climate change. Nora clearly demonstrated her awareness of beef consumption's negative impacts on carbon footprint and simultaneously showed her fondness for beef. Individual taste preference was another concern that emerged during the conversation with Norwegian women. Nina expressed, *"I don't like it [meat] that much... It's a little bit of meat consumption [for me]"*. Nelly had a similar opinion regarding meat consumption,

“Taste-wise, I'm not really a fan of beef, pork, mutton. Meat products are heavy for my stomach. They are expensive and bad for the environment as it takes a lot of water and grass to feed one cow, but I have meat once a month here and there...”

None of the Norwegian female participants decided to quit eating meat from environmental concerns. Overall, the findings showed that Norwegian female participants were not heavy meat consumers because they did not like the taste and found meat expensive. Even if they were aware of environmental consequences, their food choices were influenced little by this matter but mostly depended on price and taste. Norwegian men, on the other hand, think differently about meat. Norman contended, *“I don't really care about the food as long as the environment is not suffering or being tortured”*. Normann, who said that he consumes red meat every week, proclaimed that his concern is preserving the environment, but as the conversation progresses, he said, *“It's [the environment] not a major concern for me.”* With this statement, he contradicted his previous argument. However, his overall conversation about meat consumption clearly indicated his lack of interest in climate-friendly food.

Normann was not the only one who is not concerned about climate; Nick admitted his lack of climate knowledge regarding food, *“I don't know much about climate-friendly food. I buy the cheapest one I find”*. Nick demonstrated his priority to purchase cheap food options, and the impression he gave was that he was not familiar with climate-friendly food. When Bangladeshi students were sharing their thoughts on climate and food, they presented similar attitudes. Bani expressed, *“I am concerned about climate change, but I don't really think or check that way when it comes to buying or eating food”*. Biplob, who switched his mode of transportation due to climate concern, in a similar vein, shared, *“Honestly, I won't say my concern is that much in that particular aspect”*. It is very evident that despite being anxious for the environment, buying climate-friendly food product is not a concern for Bangladeshi students. However, Baishakhi is an exception among Bangladeshi students. She does not consume beef and, despite modifying her diet to be more climate-friendly, acknowledged that *‘Vegan options are expensive’* and that this might be a constraint to a climate-friendly diet. Her expression was similar to the Norwegian female participants. However, she was the only person who explicitly reported consuming less meat in a conscious effort to be more sustainable.

5.6.2 Transportation choices

This section explores participants' transportation choices in Norway and will try to understand their perception of climate change regarding transportation use. All participants agreed that their choice of transportation has an impact on global warming. For instance, Basir said the following, *"...If you always use fancy airplanes or natural resources like gas or coal-based vehicles, it will definitely contribute to global warming. Again, you must ensure that the electricity is generated from renewable energy when you use electric cars. So, when the energy source is renewable for electric cars, then it makes sense"*.

Basir clearly mentioned the impact transportation choice has on global warming and explained how using electric cars must solely rely on renewable energy sources to maintain sustainability. Nelly took it further and expressed the adverse effects of car usage in Bergen,

"We live in the middle of the mountains, Bergen. We're sort of like a hot pot, and if a lot of cars drive around in the center, the vehicle emissions stay in the ground, which is really bad for people who have asthma or just lung issues in general".

Nelly uttered her displeasure with car usage in Bergen and focused on the geographical location of Bergen. She further spoke about the air circulation issues in Bergen due to the presence of surrounded mountains causing air pollution and compared the condition with a 'hot pot'. However, when Nina, who also resided in Bergen, was asked the same question about climate change and transportation, she answered in the following way, *"I think we could reduce more pollution and traffic if we had more public transportation. If there was a better system for public transport, that would have an [positive] impact"*. Nina was aware of air pollution and reflected on the positive impact of public transportation. However, she did not seem to be satisfied with the existing public transport system. Thus, it was important to gain her perspective on climate action regarding transportation. She elaborated on the issue of public transportation, and stated, *"A lot more public transport is required, so that people could rely on public transport and only have to drive when they have to"*. She described the current situation as well as suggesting means of improvement in climate action. Nina believed that the issue of air pollution could be reduced significantly with a good public transport system. She indicated that there is a lack of public transport facilities in Norway which hinders climate mitigation.

It was very clear from the interviews that students were aware of the significance of their transportation choice. So, to understand how they put their awareness into action, students were

further asked about their transportation choice. Bangladeshi students shared their experience from the perspective of Bangladesh and Norway. Gender and safety issues were an underlying factor to them when choosing public transportation in Bangladesh, and this will be elaborated on later (section 7.3.1). However, Bangladeshi students did not consider this gender issue when choosing transportation once they had migrated to Norway.

In Norway, most of the participants used public transport and explained why they do so. Bani stated, *"It is kind of impossible for me to use private transport in Norway; public transport facilities are really good."* Bani's comment on public transport contradicted Nina, who was not satisfied with the public transportation service. Bani also explained the purpose for preferring public transport, *"Using a private vehicle is very costly here, the train and bus are comparatively cheap, and they are comfortable and safe too."* Price/cost was the driving force behind her decision to choose public service. Similarly, in agreement with Bani, Normann confessed, *"I don't have a car in Bergen, that is impossible. We have to pay a high tax, and having a car is not beneficial"*. Normann further compared the cost of public service with private car,

"The politician has made it really harsh to park a car by reducing the parking spots, and the parking spots are expensive. I have to give 280 Kroner for one-night car parking in Bergen, and a monthly bus card costs 440 Kroner. People can use the bus or Bybanen [the city rail] as much as they want with a monthly card. So, people choose the bus, walk, and have a good meal instead of wasting money on parking a car".

Normann described why the maintenance cost of a private car is expensive. The findings indicate that price, comfortableness and convenience were considered when choosing public transport by the students. However, the bicycle is another mode of transportation used and mentioned by half of the participants. An example of how Biplob was inspired to use a bicycle was previously described (see 5.4.2). Similarly, Nora, who uses a bicycle in her everyday life, said, *"I live really close to the city center. So, I don't use the bus or Bybanen a lot unless I'm going somewhere like going home [to my parents]."* She was further asked whether living city center was the only reason for her not using public transport, and what she might do if she lived far from the center and then she expressed, *"I think it's the climate. If I have the money to have a car in Bergen, I wouldn't buy because I don't feel the need. I like walking and riding my bike. I like using bus; it's really easy"*. Like Biplob, Nora's main concern was the climate. Noteworthy was students who ride bicycles proved with their actions that they were conscious of climate change.

Car preference was another issue raised in the interview to understand their level of awareness. Students were given an imaginary scenario where they would buy a car and asked to talk about their preference while buying. Nelly, like most other students, stated,

“I like the electric car because the range has gotten really good. It's cheap to maintain cause you're using power instead of diesel and petrol. In Norway, we get most of our energy from clean energy, water. Obviously, if you have an electric car in a country that uses coal to get energy, it might be equally bad as just using others. So, the renewable energy source is a reason to choose an electric car [in Norway]”.

Nelly would choose to buy an electric car because of the environment and cheap maintenance costs. Besides, she showed her consciousness of renewable energy, which was also mentioned by Basir. Apart from electric, some students mentioned 'hybrid' cars. For instance, Belal said, *“I will choose a hybrid car rather than 100% electric, where you can easily convert to oil or battery. It gives an extended mileage coverage with less oil consumption”.* On the other hand, Nils, who lived outside Bergen in Western Norway, highlighted his geographical location, *“I would prefer an electric car in Bergen because there are better options, but if I'm going to live in the western part of Norway, I would like a hybrid”.* Nils's choice clearly depended on the location. He further explained the reason, *“Eastern Norway has the biggest cities with many facilities, but most farms are in Norway's western part with fewer charging points for electric cars. So, I would choose a hybrid car there because it will help both economically and environmentally”.* Besides location, Nils focused on cost, environment, and mileage. He also expressed the difference between Norway's eastern and western part and how the differences shaped his climate action. So, even if he was trying to be eco-friendly, other factors influenced his mitigation choice.

CHAPTER SUMMARY

This chapter undoubtedly gives the impression that the study participants are knowledgeable and concerned about climate change. All participants believe that climate change is real, man-made and happening. The school was the first source of climate education for all participants, but compared to Norway, climate change education was felt as more relevant to the Bangladeshi participants' lives. However, media, particularly social media, played the most significant role in shaping climate knowledge and climate action for the study participants. Another interesting point made by both Bangladeshi and Norwegian participants concern political and global leaders; both

agreed that those leaders have an influence on people to address climate change, but they lack eagerness to solve the global issue politically.

Bangladeshi students were more detailed in explaining the adverse effects, causes and mitigation of climate change than the Norwegian. Norwegian participants recognized the natural changes, but they could not identify any direct climate impacts on their society. Differences in geographical location and experience of extreme climate events of two countries could be reasons for why participants displayed different climate knowledge. In addition, as to the question of the relationship between age and climate concern, we found a difference in opinions between Bangladeshi and Norwegian participants, which again relate to the point that climate exposure shapes one's climate concerns.

Apparently, participants' climate actions are related to their culture, religion, personal preferences, proper environmentally friendly facilities and especially to financial conditions. Climate actions related to participants' transportation choice in Norway did not reveal any gender disparities. Participants described using public buses or cycles, but they showed slight differences in climate awareness. For example, the price was the main influencing factor that led participants to choose public transport, whereas riding a bicycle was a conscious choice primarily influenced by environmental concerns. While lower price directly or indirectly influenced participants' transportation associated mitigation actions, a higher price for climate-friendly food appeared to be an obstacle to opt for sustainable diets. Gender differences were noticeable in examining their food habits as female participants showed greater concern for sustainable diets than the male participants. This trend also manifested itself in participants' climate concern, where it has seemed that female participants from Bangladesh and Norway were more concerned about biodiversity loss and individual climate mitigation strategies than male participants.

6. UNDERSTANDING GENDER

Before correlating participants' gender and climate change perception, it is important to grasp their understanding of gender concepts. Hence, this chapter explores the ways participants see gender and gender disparity based on their context. It also focuses on how participants act in response to gendered expectations and how they view gender norms. This will serve as a foundation for further gender analysis in climate change and climate action, which will be addressed in chapter seven. It is to be noted that as the study participants are from Bangladesh and Norway, their responses will reflect their lived reality.

6.1 DEFINING GENDER

Participants talked about how they perceive the concept of gender before reflecting on the existing gender differences in Norway and Bangladesh. Students exhibited various views and opinions while defining gender. Most participants talked about the influence of their educational background on their respective gender understanding; for instance, Basir expressed, *“I don't have a very personal thought because I have been studying social science. So, gender is a defined role for male and female by society”*. Basir's argument indicated that his opinion on gender is based on his field of study rather than on his personal experience. Some students were much more explorative when defining gender. They commonly use the word *'division'* to define gender, alluding to both biological and social differences; for example, Nina contended, *“Division, it's a way of sorting into groups, differences between genders. Women are more expected to be caring for people, the planet, animals, while men are expected to live up to the masculine stereotype”*. Nina referred to the behaviors and actions deemed acceptable for individuals depending on their biological sex or sex given at birth. However, Beli said the opposite, *“When I think about gender, sex comes to mind, which has really little to do with gender. Sex is not actually determining our gender roles”*. For Beli, it seemed like biology does matter, but it no longer has to define any gender roles. So, along with some other students, she seemed to understand that gender and sex are two different concepts. However, Normann gave yet another explanation for what gender might be, *“You have social gender, i.e., the thing you do to identify yourself. Social gender is a social journey based on the stereotype of what needs to be done to identify as a man, woman, trans or other gender types...”* Normann used an interesting term, *'social gender'*, to describe how an

individual expresses him/herself, or more specifically, people's gender expression. He argued that one's gender expression shapes one's gender, and one has to follow the gendered expectation to conform to one's identity. His statement, particularly his description of a '*social journey*', indicated a view of gender as a social construction. However, a few students found it challenging to explain gender. For instance, Nora contended,

"I guess, biologically, if you menstruate, if you can have a baby, I guess then you're a woman, but I don't know. This is a hard question because you want to be inclusive to people, not necessarily having a vagina but still being a woman. So, I guess it could be if you have feminine needs or want to do feminine stuff; I don't know; it's a hard question..."

Initially, Nora associated gender with primary sex characteristics that are genitalia and genetic differences between two purely fixed options. However, on further reflection, she found it difficult to define gender because she wanted to be '*inclusive*', and by '*inclusive*', she seemed to incorporate transgender phenomena in her gender definition. Other participants related gender to biology, physical features and the aspects of societal expectations; for instance, Baishakhi said,

"As the idea of gender is biological, defining gender would be a little hard for me. Since childhood, I have been told that these are the specifications of a woman, like she must have long hair with the basic physical features of a woman. A man would have short hair and will not do household chores. So, the things learned in society and family are what usually come to my mind".

Baishakhi claimed that biological difference makes it challenging to define gender. Besides most typical social expectations from women to have long hair, Baishakhi also reflected on biological differences between men and women, referring to '*basic physical features*'. Her gender perception highlighted biological differences of bodies and social representations of men and women which are directly influenced by her family and society. As her conversation continued, she contended, *"Now, if I say something from my knowledge gained from different studies or my life experiences, I don't think gender can be defined by any specific work or physical features"*. Here, like most other students, she agreed that education has changed her perception of gender, and her earlier statement was based on her previous gender assumptions. On the other hand, Normann expressed, *"I think gender can be understood as biological, which means either you are born as a man or woman. Social perception identifies your gender. Then you have your own feeling, and everyone has the right to express; it's their life"*.

Biology and social norms are interchangeably used to define gender by Normann. He described gender from a biological viewpoint, by which he intended to mean the sex assigned after birth. His further statement suggested that human sex and gender are distinct, and gender is not related to one's physical anatomy, which is also indicated by Beli. Then in the same vein as Nora, referring to transgender, he continued by speaking about one's feelings and talked about gender identity, *"People may feel another gender than their presumed sex category. Biologically, I think it's just man and woman. In the social context, they can identify as who they are"*. Normann indicated that an individual's gender identity can correspond to or differ from his/her assigned sex at birth. It seemed normal for him to accept a nonbinary concept of gender, where people do not fall into the male-female category. Normann was not the only student who associated gender identity with one's feelings. Beli defined gender identity as *"...How an individual wants to be recognized"*. Though a few students struggled to define gender, their ideas around gender identity seemed to be more straightforward. A few students reported that they did not understand gender diversity; however, they were still very respectful about how individuals choose to act and identify. For instance, Nina stated,

"I used to understand that there are men and women or masculine women and feminine men. The past few years, I've been reading and hearing more about being nonbinary. I don't completely understand how it works, how you can be in-between, but I respect it; I try to educate myself more and be open to know that people are different, and some are born in the wrong body. I think it's very interesting and my perception of gender has changed during the past few years".

Though Nina had confusion around how an individual may feel not to fit into the traditional binary concept of gender, she demonstrated a keen interest in gender and educated herself by different reading materials. This is interesting because most students argued that gender is initially shaped by what they have been taught growing up. At the same time, Nina, like other students, acknowledged that her initial understanding was limited to binary gender concepts and also reflected on how her perceived idea of gender has changed over time.

The participants shared insightful reflections on gender as a concept. Though a few participants talked only about the binary concept of gender, most of them seemed to include biological and social differences between men and women as well as nonbinary gender concepts in their understanding of gender. At the same time, it is noticeable how they explained social perceptions defining gender and gender identity. In addition, they seemed to believe that gender is socially

constructed and also considered that social perceptions and expectations impact how individuals' express gender or do gender. Interestingly, though personal experiences influenced their previous gender understanding, education played a vital role in shaping their present gender perceptions.

6.2 GENDERED EXPECTATIONS

When interviewing participants about gender, a significant part of the conversation focused on the expectations they get from their family, friends and society. Parenting, gender roles, and gender expressions are three forms of expectations repeatedly mentioned by them. They also acknowledged that these expectations could have an impact on how they behave themselves.

6.2.1 Parenting

None of my participants is a parent. Despite having different socio-cultural backgrounds, almost all students observed differences in parenthood and agreed that parenting is gendered. Basir said, *"Our parenting is clearly defined; mothers are responsible for food, taking care of the child. Everything exclusively depends on the mother. Suppose you are studying at school, maybe your father takes you to school and talks with your teacher, but when you were a child, your mother took every responsibility"*.

Noticeably in Bangladesh, fathers do not receive any parental leave; therefore, the mother is often fully responsible for the children. Nonetheless, the perception that women need to take care of their children is not limited to Bangladesh because most Norwegian participants agreed that Norway has fewer limitations to what men and women can do in their society than any other places, but they do not deny the existence of gender roles. Nora and other Norwegian participants agreed that *"...Not like officially or legally but there's a lot of gender roles we still have and it's just like, 'Oh! Yeah! That's how it is'. That's strange!"*. Nelly elaborated on these gender roles and defined how expectations vary in parenting,

"In Norway, both mom and dad work, and there's no sole breadwinner, but I still think that there's some sort of idea that she's the one who has the main responsibility of the kitchen, she should have control over her kids, and then the dad should help out. Then the dad has control over the garage and things like that, and the mom should help out, instead of being equally distributed".

Nelly believed that gender roles are not *'equally distributed'* in Norway, coinciding with Nora's statement. According to Nelly, though both genders share the provider's role in Norway, women as a parent are expected to take a bigger share of domestic labor and caregiving role. Both Basir

and Nelly represented most participants' views regarding gender ideas about parenting in which society expects a mother to take care of the home and family. Bangladesh follows a patriarchal social structure, and Norway is a relatively gender-equal country, but gendered expectations keep surfacing in Norway. Nora highlighted Nelly's points using an example of how attitudes are normalizing such expectations.

"If a father is alone with his children at home, then it's 'babysitting' his children. If a woman is alone with her children at home, she is not 'babysitting' them. It's not a job for her. It is what's expected. It is not like she's doing the family. You don't babysit your own children. That is like being a parent, but I feel a lot of women saying, 'Oh yeah, he's so nice, he's babysitting the children'".

Nora pointed out the difference in perception regarding fathers and mothers taking care of their own kids. A mother is expected to be the primary caregiver, and this caregiving is perceived as feminine. For instance, Baishakhi expressed, "...Femininity is, in a sense, a responsibility towards family and caring towards children." Norwegian participant Nils shared a similar opinion, "Femininity is often referred to as motherhood and the female form." However, from the above discussion, the students indicated that social expectation and the idea of femininity put a heavier burden on the mother than on the father.

6.2.2 Traditional gender roles and norms

Participants talked about the existence of traditional cultural norms in their society. Bangladeshi culture does not allow couples to have children before marriage. As a consequence, the expectation from a woman to get married was widely cited by all Bangladeshi participants, but becoming a mother or motherhood was a particular concern for Norwegian participants. Nina stated,

"From the past few years, it has become cooler for women to have higher education, but there's always an expectation that women will get married and have children. No matter what you do or what your career is, you will always get that question, 'When do you have children? Don't you wanna be a mom?'"

Similarly, Bangladeshi participants Biplob agreed with Nina and said,

"I think the expectations for men from their family or society is to become a good breadwinner and an established person... One of the biggest expectations for women is getting married to a 'good family' and having kids. Maybe she can study, but she always has to think about the part where she has to marry and have kids."

Besides marriage, another common expectation for both Bangladeshi and Norwegian women was to do domestic household work. Most participants reflected on this; for example, Baishakhi spoke about gendered expectations regarding household chores in Bangladesh, *“Men will not have basic life skills and will not do basic things like cooking and doing their own laundry. These are defined as women's work”*. Baishakhi defined cooking as basic life skills and classified it as *“women's work”*. Normann, in a similar vein, spoke from Norwegian context,

“We are more liberal to what men and women can do, but when it comes to a certain expectation, they [society] might see women more taking care of children, more likely being the role of a mother and taking more charge at home... Men have more approach when it comes to being the provider of the family...”

Even though only Bangladeshi students associated masculinity with the role of a breadwinner, Normann and some other Norwegian participants also reflected on the fact that men feel some kind of obligation to fulfil the provider role in a family in Norway. However, regardless of the national disparity, stereotypical traditional values and gendered norms were prevalent in participants' discussion of gendered expectation. This was surprising, as it was anticipated that gendered expectations felt by Norwegian women would be different than those of Bangladeshi women, the “gender equality status” of their countries taken into consideration. Unexpectedly, participants not only recognized the gender gap in household labor and caretaking roles, but female participants from both countries also seemed to feel those expectations as pressure for themselves. Participants linked the caring nature of a human being with femininity. Nora, like other participants, stated, *“Femininity is, of course, like caring, and also neat-clean, and stuff like that”*. She also gave an example from her own life and spoke about the impacts of social expectation on her behavior,

“My partner and I live together. If we're going to have guests, whether it's my guest or his guest, I have to clean my home and make it, 'Aah! Clean and perfect', and for them to feel welcome. He's like, we don't need to do that, and I guess that's because he doesn't get the consequences of what he does. He is not the one being like, ‘Oh man; he can't keep a home’. We just expect men not to keep a home, whether as a woman, it's like, ‘Oh! Wow, she's really messy or has she dusted?’”

She indicated how society shaped her role and simultaneously had fewer expectations to her partner as regards domestic works. Interestingly, when Norwegian men were asked about social expectation and gender roles, they said that they do not feel any expectation. For instance, Normann contended, *“I don't feel there is any expectation. Maybe I don't feel those expectations”*.

Similarly, Nick said, *“No, I don't think there is any expectation”*. Normann previously agreed that there are certain social expectations for men and women and also drew examples of how women are expected to be caregivers of a family. When I asked whether he feels any pressure from such expectations, he clearly refuted feeling these expectations personally. So, he did not deny that societal gendered expectations exist; he only denied feeling the influence of them on himself. On the other hand, Bangladeshi male participants shared a different viewpoint while explaining their gender role and societal expectations. Biplob said,

“My expenses are covered by a scholarship, but I try to be my family's financial provider. I am the eldest and only male child; I feel like it's my role to contribute financially. So, I do some part-time work to support them. Personally, I don't need to work, and they don't look at me as a provider; still, I try to provide”.

Biplob defined himself as *'male child'* and *'provider'* and his financial contribution to his parents as his *'role'*, which showed how prevailing expectations in a particular society affect an individual's identity. During the discussion on masculinity, Bangladeshi participants reflected on social norms and associated masculinity with being *'the provider'* or *'the breadwinner'* of a family. So, all participants from both Norway and Bangladesh were well informed of gendered expectations, but only Norwegian male participants did not seem to feel this as pressure on themselves like the Norwegian women or the Bangladeshi participants did. In addition, it is also visible from participants' critique of traditional social norms; even though some participants adhere to such gender norms, they tend to be unhappy with this.

6.2.3 Gender expression

Individual behavior and gender expressions emerged during the discussion on masculinity and femininity. Most students took a long time to think and struggled to explain masculinity and femininity and sometimes defined it as a concept or ideology; for instance, Normann stated, *"A feminist is a person, who stands for equal rights between gender, supporting female right. It is harsh. Femininity is maybe a social perception of ideology..."* Like other students, he could not think of anything else until asked to relate masculinity and femininity with their society. Normann further said, *“When it comes to commercial or TV shows, previously women are presented as caring; men must get what is required by women. They will stay looking beautiful... Femininity is also associated with how women appeared, dressed and socialize”*. Belal agreed with Normann and claimed, *"Femininity is something soft and sweet, and this is what is expected from women.”*

When students were asked to define the concept with an example or more elaborately, the discussion turned into how a woman or man should behave or express their gender. Most participants associated men with masculinity and woman with femininity. Also, conversations on femininity indicated how society exerts pressure on women to look beautiful. After discussing masculinity and femininity with the participants, they were asked to relate their daily activities with gender identity. The participants' thoughts on this varied, but many female participants put examples of wearing makeup, high heels, and clothing that defined them as feminine. For example, Nora said, *"If there's something I do for femininity, it would have to be something with my looks. Like, wearing makeup."* However, Nelly countered that saying,

"Maybe I tend to use more makeup than the man. I'm a part of the LGBTQ community, and I know many men who like to experiment with makeup. I like to see that. I don't feel like there's anything I do because I'm a woman. It's more because I like it, but the things I like might be stereotypically associated with the women, like, I'd like to wear high heels, long coats, makeup and get dressed up, and I have long hair. I always want to cover my pimples and have pink eyelids".

As she did voluntary work for an LGBTQ organization, she was familiar with men wearing makeup. Therefore, she didn't consider wearing makeup a feminine act; however, she also agreed that makeup normally is associated with women. Nelly continued by discussing nonconformity:

"If I were a man and did the same thing, I might be looked at weirdly because it's a bit restrictive for men to dress as women. Women can be more masculine, and that's more accepted, but it's not necessarily as accepted for men to be very feminine, wear high heels, or have long hair. They're often branded as gay or transgender even if it's just their own gender expression, they can still feel entirely male. In that sense, maybe there are more restrictions on male gender expression in Norway".

Nelly focused on individuals' external representations, which she later mentioned as 'gender expression'. She argued that women could have more masculine features and that a man being feminine is seen as undesirable. She also explained the burden a man may have to carry for fear of being categorized as effeminate or gay. These restrictions are not solely applicable to clothing presentation but also emotional expression. Nelly was not the only participant arguing that men are restricted to express their feelings. Nina contended, *"I guess the issue is to live up to the masculine stereotype, being tough, not talking about emotions, not reflecting over own feelings"*. Biplob also agreed with Nina, saying,

“When a guy says, ‘I am a man’, people are supposed to expect that he is strong, established [financially], brave and bold. That’s why people sometimes say, ‘Be a man’. Another stereotype is that men can’t cry or are not supposed to get emotional”.

Both men and women reflected on masculinity and emotional expressions. They agreed on how social expectations may refrain a man from expressing their vulnerable emotions and how it is related to a man's masculine features. Biplob further added, *"One of the biggest demeaning things which exist in this society is when someone gets taunted by phrases like 'like a little girl', 'like a woman'. Through this taunt, they are demeaning that person by saying he is weak."* By saying this, he was indicating that women are seen as weak, and thus men feel humiliated when someone compares them with women. Thus, he drew an implicit assumption that men should be stronger than women. However, Bani and Nora associated men and masculinity with *"Arrogance", "Power, anger, really not crying"*. So, the masculine stereotype mentioned by the participants indicated that certain emotions that are seen as masculine are more acceptable to be shown by men. However, male participants did not discuss whether emotional expectations impacted them or their gender identity personally. On the other hand, female participants discussed their own gender identity and gender expressions; for instance, Baishakhi contended,

“I wanted to wear western clothes, but jeans and shirts were defined as man's clothing in my society. It felt odd to wear shirts, and I also considered how other people would take it. In Norway, I am choosing and comfortably wearing those clothes which once were unimaginable because here, no one is judging me. In Bangladesh, I had to be cautious with my dress or clothing as roads are not safe”.

Rape and sexual harassment are highly prevalent in Bangladesh, which has been mentioned by all the Bangladeshi participants while talking about transportation choice. People in Bangladesh often don't blame such heinous acts on the perpetrators but primarily on women's clothing (section 7.2.1). By mentioning, *"In Bangladesh, I had to be cautious with my dress or clothing as roads are not safe."*, Baishakhi actually correlated this unsafe environment of women in Bangladesh with the way women dress. Similarly, Norwegian participant Nelly shared her experience while studying in high school in India, *“I don't think much [about it] in Norway, but I did in India... I needed to wear long pants or skirts in summer. I couldn't show my legs because I was a woman”.* Nelly seemed displeased with such social norms and continued with an irritated tone, *“It made me angry as once it was 40 degrees, but I don't think I am aware of it in Norway; it's acceptable here”.*

Bangladesh and India are two different countries that share a border and have a similar socio-cultural environment. Baishakhi and Nora revealed that they had to be conscious of their outfits in Bangladesh and India, yet in Norway, they did not think of their outfit because it is more accepting to wear western clothes by women. They claimed that Norway is much freer in terms of gender expectation and gender expression. Their experiences pointed to the fact that social norms shape gender expectations, but socio-cultural environments strongly influence those expectations. Hence, an individual's physical appearance is highly associated with the socio-cultural context.

CHAPTER SUMMARY

Norway is globally considered a gender-equal country, whereas Bangladesh still follows a patriarchal social structure. As the study participants grew up in two different social settings, it was expected to have distinct opinions from the participants while discussing gender. Surprisingly, all participants, including Norwegian, agreed that gendered expectations in association with masculinity and femininity exist in every sphere of their lives, but these gendered expectations are found less in Norway than in Bangladesh. With the exception of Norwegian male participants, most participants demonstrated that they feel specific pressures from society to meet those expectations and conform to their socially ascribed identity. However, female participants were more inclined to uphold their feminine identity through their gender expression and follow traditional gender roles than the male participants.

Despite acknowledging gender norms and conforming to 'do gender', participants' gender understanding mostly did not seem to rely solely on binary gender concept; rather, it reflected the inclusiveness of gender diversity. Education on gender issues has shaped participants' gender understanding. Furthermore, students contended that gender is socially constructed, and one's gender identity may be incompatible with one's defined sex category. Their gender understanding was not limited to any specific gender-specific roles or masculine and feminine traits, and they appeared unhappy with conventional gender ideas centered around the biological and social differences between men and women.

7. GENDER AND CLIMATE CHANGE

While chapters five and six addressed gender and climate change independently, this chapter will explore how climate change and gender are related to the study participants' view. Findings from chapter five revealed some differences between genders and nationalities regarding participants' climate perceptions and concerns. In chapter six, it became apparent that all participants are aware of gender norms. With the exception of Norwegian male participants, the participants also experience pressure to adhere to social expectations, and they often conform to these norms. This chapter will now concentrate on the aspects of our discussion in which participants reflect on gender related to climate change. This chapter will begin by drawing attention to how climate understanding varies between genders and how gender influences sustainable behavior. Finally, an association between gender and climate action will be presented, emphasizing food, transportation, and clothing.

7.1 CLIMATE CHANGE UNDERSTANDING AND GENDER

In this section, 'understanding' represents only knowledge and awareness of climate change among the students, not mitigation actions. Participants believed that understanding of climate change is interrelated with gender, which may further influence his/her climate action, and this section highlights how all participants connect gender to climate change understanding.

All participants are convinced that women are more concerned and have a better understanding than men, and for instance, Baishakhi said, *“I think women prefer to have complete information and then employ it. For males, they like to choose whatever is convenient for them”*. Baishakhi further drew an example of her own experience,

“I have a male and a female vegetarian neighbor. I noticed in a discussion that the guy did not know all the facts about why he chooses to be a vegetarian; he did not even care about animal killings; he only knew that his choice might have an impact on the environment. My female neighbor was sincere, well-informed about statistics and knew the consequences of her activities on the environment”.

Baishakhi's example compares environmental awareness between two genders who follow a sustainable diet in their food habits. Baishakhi's claim is supported by Nora's example of climate action where Nora discussed her boyfriend's unconscious choice of being occasional vegetarian, *“My partner is finally eating vegetarian, but it's not a point for him to have a vegetarian meal. It*

is just like if it happens, it happens, it's not his conscious choice". It was clear that Nora's partner did not mindfully choose to eat vegetarian from an environmental concern, and she further expressed, *"I don't think that men understand the problem [climate change] differently, but maybe that's the thing to do with solidarity. Men don't necessarily believe that it will affect them personally; it's harder for them to engage as women do".* Nora indicated that climate change understanding between men and women is equal but that men do not take it seriously due to the lack of 'solidarity' which she previously mentioned as a feminine feature. This perceived feminine characteristic, according to her, restricts men to engage in climate change mitigation. However, some participants related climate knowledge with men and leadership. Normann stated,

"Men tend to ignore climate change because most corporate and state leaders are men who don't want to bring change in production; they are trying to cool the people down by saying, 'This is not a problem; we have it under control'. This is just propaganda. They understand it, but they are trying to deny it. Therefore, men or politicians look up to the guy who is denying climate change".

Normann focused on politics in his assessment and argued that political and corporate leaders' unwillingness and indifferent attitudes influence other men to deny climate change. He further said, *"Men support the right side of politics more than women, which tends to deny climate change. Women stay more left-oriented, and the left-oriented parties are more climate-friendly, and therefore, women like to get more climate-friendly".* Normann linked political orientation, climate change opinion and gender. He indicated that the political orientation of an individual influence climate change understanding. In agreement with Normann, Nora, the former member of 'Nature and Youth' organization, expressed a similar opinion, *"We just naturally learn that men should be in leading positions... Most world leaders are men, and they are the ones who are responsible for climate change because they do not do anything".* Nora reflected on social expectations about men in leadership and, like Normann, stressed the influence of male leaders in climate change understanding. When comparing the examples of Normann and Nora, it is clear that social expectations, leadership and climate change consciousness are associated with each other. Basir shared an interesting experience, reflecting on men's leadership roles and influence in decision-making on climate action in the family,

"I am a son in my family. If I say, 'Mom, use that eco-friendly bag', my parents might use that thing. If I were a girl, it is less likely that my mom and dad would hear me. They will listen to me more than my sisters, who are also educated like me".

Like Basir, other female participants also talked about their own experiences with that of influencing men in climate action. Baishakhi stated,

“...If I ask any of my female friends not to do something, they end up listening, but male friends rather argue and do not try to get convinced. Men usually end up doing things they are told not to do. It hurts their ego when a girl suggests anything to them. Maybe they have an attitude of, nothing would happen, men can do everything”.

Baishakhi reflected on the differences and difficulties when trying to convince men and women to change their behavior. Similarly, Norwegian participants appeared to agree with Baishakhi; for instance, Nina contended,

“When men are being told that they shouldn't do this thing, say, ‘You shouldn't eat meat because it is not better for the climate’. It feels like many men have the reaction of, ‘Yes, I can do, I can do it if I want to, I can do whatever I want’”.

Like Baishakhi, Nina also indicated the opposing behavior of man towards sustainable action. However, they both commonly shared the idea that men feel entitled to do whatever they like just because of their gender. Nina further continued, *“Whereas women's reactions are, ‘Oh, really! Why is that? Why shouldn't I? What can I do instead?’ I'm not sure where that comes from, but it feels like men are protesting more and being a little childish about it”.* Nina explained how she thinks that women's approach is different from men in climate change conversation and supported Baishakhi's claim that women try to understand the concept and circumstances before acting. It is evident from the discussions with Basir, Baishakhi and Nina that, while they think that women have a stronger awareness of climate change, men have a more significant impact on others in making decisions about sustainable action.

7.1.1a Impacts of climate change

Discussions on the impacts of climate change in society showed differences between Bangladeshi and Norwegian participants (section 5.1). It seemed that Bangladeshi students understand the impacts of climate change better than Norwegian students. Some of the participants highlighted a connection between gender and vulnerability to climate exposure. For instance, Biplob drew an explicit example when he talked about migrant workers of city slums and how their wives live with their little children and tackle all climate hazards alone. Biplob expressed,

“Climate change understanding depends on how an individual is exposed to climate change information or the context. Women [the wife of migrants] and children in the city slum areas are

vulnerable to untimely rains and facing the direct impacts of climate change. So, they have a different understanding than those who face other climate hazards”.

Most male migrant workers move from place to place and stay away from their family at distant places for several weeks or months. Their family remains in the slum. Biplob discussed that situation and reflected on how intensity and experience of environmental phenomena vary even between household members. Considering the differences in climate change exposure, he seemed to indicate that women are more vulnerable due to their caretaking role in a family than men. In line with women's vulnerability to climate change, Basir talked about intersectionality,

“There is a connection between gender and climate change, especially with the female. I will use the term 'intersectionality'. If you are a woman, immigrant woman, black woman, then again, you are climate vulnerable; all those inequalities together increase your vulnerability, and you don't get an opportunity to stand up because vulnerable people suffer the most in the climate crisis”.

Like Biplob, Basir linked gender with climate vulnerability. He indicated that climate vulnerability is gendered, and women are more vulnerable because of their gender, race, and socioeconomic factors. He further gave an example of how climate exposure is more interconnected with women, *“Poverty could be a result of climate change. Children and women are suffering the most from poverty. So, again climate change is making the situation worse [for women]. Women usually eat leftovers in the family, but when poverty comes in, they even don't get the leftovers”.*

The relation between poverty and climate change is also demonstrated by Belal. They reflected on how poverty exacerbates existing gender gaps by increasing vulnerability and making it difficult for women to adapt to the change. On the other hand, Nora linked climate battle and feminist battle with one another.

“Climate change mostly affects poorer countries with poorer structures. Statistically, women are poorer, and they manage those changes really badly. So, I guess the feminist battle is also a climate battle because you also protect the women if you protect the environment. I think globally and statistically, women will be more affected than men”.

Nora agreed with Basir's claim on women's vulnerability and poverty. After linking environmental degradation and gender inequality, she argued that, as women are the most vulnerable and suffer disproportionately due to climate change, mitigating climate change can increase gender equality. She implicitly focused on ecofeminism, where feminism and environmentalism are intertwined.

Gender also emerged when discussing the personal impact of climate change. Effects of climate change on personal life included anxiety and fear, a variety of depressive emotions, and habitual change. For instance, Bangladeshi participant Belal expressed his emotional association with climate change in the following way, *“I am highly anxious... Shifts in season and frequent disasters caused by climate change is definitely responsible for climate anxiety for any human being”*. Belal demonstrated his anxiety caused by experiencing frequent climate events. Other female participants gave similar expressions; for instance, Baishakhi stated, *“I am scared; the country [Bangladesh] I grew up in will no longer exist on the world map”*. Baishakhi reflected on sea-level rise, one of the significant climate impacts responsible for disappearing the land in Bangladesh. So, it is quite evident that climate exposure influences emotion. Aside from some environmental changes, Norwegian male participants did not find any specific personal impacts regarding climate change, probably because they are not among those affected by climate change sooner. However, Norwegian female participants have a different impression; for instance, Nora stated, *“I am often scared and worried”*. Nora's expression could indicate that women are more afraid of climate change or more willing to share their vulnerable feelings than men. Besides, two Norwegian female participants spent time in India and Africa, in climate-vulnerable communities, and were involved in organizations focusing on climate change. This fear may also come from their experience, reflecting Normann's previous statement that climate exposure shapes climate concern. However, in general, female participants expressed more fear than male participants.

7.2 MITIGATION ACTIONS AND GENDER

Climate action includes mitigation strategies that aim at environmental sustainability or/and decrease greenhouse gases. The first thing to notice also indicated above is that participants find women more concerned about climate change than men, and they also believed that women are more active in climate mitigation than men. For instance, Nora said, *“I think men easily don't get engaged in the climate change battle”*. Nora demonstrated her opinion on men's commitment to climate action and labelled climate action as *'battle'*. She used the word *'battle'* several times during the conversation to express her seriousness and anger as concerns mitigation action. Belal gave an example comparing the engagement of women and men in climate action, *“...Women are more aware of climate change than men. For example, women usually look for a bin, whereas men don't care at all. Men never prefer to bring home-cooked food for lunch, but this is the opposite for*

women”. The differences between men and women in climate action are well reflected, and Belal's illustrations supported female participants' climate concern. In fact when students talked about how they use the idea of recycling, Beli said,

“I always carry a small ziplock bag and tote bag. If I don't find any garbage bin, I keep my garbage in that ziplock, and the tote bag is to carry my everyday grocery. Sometimes, I fail to reduce my plastic use even if I try harder. Some grocery shopping needs to be weighted, and sometimes I am not allowed to weigh without a plastic bag”.

Beli's effort and incapability to reduce her plastic consumption were well-reflected in her statements. She also shared how lack of practical support in public spaces hinder her in taking climate action. Supporting Beli's claim regarding grocery shopping, Nina seemed to be more active. She followed a unique way, *“I sew some small tote bags for weighing my grocery and always carry those to the shop. These are washable, reusable, and sometimes people do appreciate this effort”*. Both Nina and Beli displayed how female participants individually practice climate action in their daily lives, which coincided with what has been said by Belal. Some students claimed that women's environmental concern is based on their innate features; for instance, Beli contended, *“Women, by nature, are more caring than men. So, they probably think a bit differently than men in climate action”*. Normann also agreed with Beli, *“Women are more caring than men. Seeing how plants, environment, animals, and species are disappearing, they feel to do something. They feel more responsibility to save the earth, and that's how maybe women began to be more active”*. Both Beli and Normann seemed to think that 'caring' is a prevalent natural act of women that drives them to care about climate change and be willing to embrace mitigation action. This assumption indicates a gender gap in sustainable behavior. Other students also articulated 'caring' as a feminine trait, and eco-friendly behaviors are stereotyped as effeminate. Nelly, for instance, said,

“It's more okay for women to care about sustainability; if we go secondhand shopping, to vintage stores, or get the vegetarian option, that's cooler, and okay, everyone does that, but I've talked to my male friends; they feel like it's feminine to care about those things...”

Nelly then shared an example of sustainable action from her own life,

“For instance, driving a car, men want a car that makes a lot of noise and sound. It's like only middle-aged women drive those small electric cars. I do think that's changing a bit in some

communities, and there's a shift now. My elder friends are a bit more restricted than my younger brother and his friends; they're more open".

Besides highlighting effeminate actions, she mentioned positive shifts in young men's attitudes and pointed out that they favor electric cars more than their previous generation. A similar statement was also given by Nina. Nelly continued,

"My male friends, who are not afraid to be perceived as feminine, have no problems admitting that they care about sorting waste and not eating meat and these things, but some of my male friends are very stereotypically masculine, are very worried about being perceived as feminine or vulnerable. I know why the men don't care; it's cool not to care about these things. All my girlfriends care [about the environment], even if they are stereotypically feminine or masculine. They all agree that this is something that we need to do".

As seen in section 6.3.3, Nelly stated that men are expected to conform to masculine ideals more than women in society, and here she is connecting climate change with her previous argument. She indicated a perceived contradiction between masculinity and climate actions that may hinder men from participating in climate action by branding these actions as effeminate or vulnerable, but that she sees no such link between gender identity and climate action among her female friends.

7.2.1 Transportation choices and gender

Transportation plays a significant role in climate action, which is briefly discussed in section 5.6.2. Students from Norway and Bangladesh associated gender with transportation choice based on experiences from their own context. All the students considered public transport as a mitigation action. However, Bangladeshi participants associated safety, religious obligation, and social status of a woman with public transport. For instance, Basir stated that,

"Women barely use public transport in Bangladesh. My mom and my family use cars or CNG [three-wheeler taxi] because the buses are always crowded. My brother or my father can easily commute by bus, but my mom can't manage or maintain everything from her religious perspective on a bus. Also, someone will tell you, 'You are rich; why are you travelling by bus?' I mean, they consider that bus is for poor people. So, you are under social pressure, especially when you are commuting with women".

The majority of women in Bangladesh is Muslim and follow some religious obligations, such as for women not to be close to any men that are not their close relatives. So, women usually wear a veil to cover their hair, neck, and body. Basir highlighted the fact that due to the insufficient

numbers of busses in Bangladesh, and the fact that they are always crowded, women do not use public vehicles out of fear of religious indignity. Besides, he highlighted how social status and social pressure is linked to public transport use. According to Basir, social pressure and religious obligation regarding public transportation use are applying to women only, not men. Along with the obligations mentioned by Basir, women in Bangladesh also have to be aware of sexual harassment, which Bani and other participants spoke about.

“I never used public transport in Bangladesh because women get harassed in public transportation, and the public buses are so packed that a girl would never feel safe and comfortable. Boarding an overcrowded bus is sometimes impossible for women. I used a rickshaw, uber and CNG... Public transport facilities are excellent in Norway”.

There are reported cases where women experience verbal and physical sexual harassment on the public bus. Bani justified her reason for not using public transportation by pointing out how public transport is unsafe in Bangladesh. Though Bangladeshi students were not consciously choosing public transportation for sustainability, they highlighted the unsafe environment and social restrictions for women and how it shaped their choices and constrained climate action in Bangladesh. This is further supported by the fact that all the Bangladeshi female participants started to use public buses and trains in Norway, suggesting they would choose to use public transport in Bangladesh, likely as part of climate action if they felt it was safe for them to do so. Conversation with Norwegians showed a different point of view. Nora stated, *“I think women have fewer driving licenses than men in Norway. That is my experience, and I think women are more used to travelling by public transport”*. Nora highlighted the issue of driving license in Norway to compare transportation choice between genders as climate action. In this general comparison, she did not speak about her own transportation choice. Later, however, she gave an example from her personal life, *“Men have a tradition of being interested in cars than women, taking pride in their cars. If my partner and I had a car, I think he would drive more; that could happen because I'm not interested in driving”*. One possible link between transportation and sustainable behavior could be that women are less interested in driving and, therefore, assumingly emit less carbon than men. However, Nils had a different opinion, and he expressed, *“Women are using more buses or trains than men, but at the same time, I've seen more guys cycle than girls, at least here in the big city”*. Nils seemed to support Nora's claim that women prefer public transport while men cycle more

often. From section 5.6.2, it is evident that all the participants either use public transport or cycle. Besides, they do not represent any gender differences in their transportation choice in Norway.

7.2.2 Food consumption and gender

The relation between food and gender is briefly shown in section 5.6.1. The two common key differences that emerged in the previous chapter are that male participants consumed more meat than female participants. Secondly, female participants are more likely to support a vegetarian/vegan diets than male participants. However, Bangladeshi and Norwegian participants showed different concerns when relating food habits and gender to climate change. While discussing food consumption and gender, Belal expressed, *“It is scientifically proven that men consume more food than women”*. Belal reflected on the differences in the amount of food consumption between genders, and most of the students were highlighting the same claim. However, I was not sure how to connect their repeatedly claimed food consumption pattern with climate change until Biplob said, *“In general, women consume less food and thus less responsible for climate change.”* Biplob was the only one who made an explicit connection between food consumption and climate change. However, the conversation of climate change, gender, and food changed direction from climate concern to masculinity; Norwegian students associated masculinity with meat consumption. Nina expressed,

“One of the things that are kind of stereotypically manly is eating a lot of meat which is weird, I think. There's a weird resistance from a lot of men from my perspective about eating vegetarian. It is typically seen as cooler for men to really like meat, which is very strange, and it's more expected or normal for women not to eat meat”.

Nina argued that meat consumption is a representation of masculinity and an admirable positive trait for men. She further reflected on the opposing attitudes of men towards a vegetarian diet. This could be because of the stereotypical assumption that being vegetarian is feminine, something which was also addressed by Nelly. However, Nelly mentioned why men have more affinity towards meat, *“Men often want to get bigger and get muscles; they need more proteins, meats, starches, and some vegetables”*. Nelly linked men's physical appearance with meat consumption. According to her, meat consumption could be an attempt by men to grow muscles. Interestingly, all the men in the interviews associate masculinity with 'muscle'. Norwegian participant Nick said, *“Manliness or masculinity is often associated with big muscles”*. Similarly, Bangladeshi participant Belal expressed, *“Masculinity is interrelated with muscles, the physical strength of a*

man”. Male participants who preferred meat did not clarify whether their own meat consumption is influenced by a desire to develop more muscles or being linked to a stereotypical assumption about masculine features. However, their association between meat and masculinity indicates that having a muscular body is essential to appear as masculine.

7.2.3 Consumption of clothes and gender

In the previous chapter, participants seemed to draw a connection between gender identity and gender expression where they associated femininity with women looking beautiful and well dressed. Although both Bangladeshi and Norwegian female participants indicated that gendered expectations and social norms influenced their gender expression through clothing, Norwegian female participants appeared to be quite concerned about their clothes consumption and use. For instance, Nelly expressed, *“I never throw away clothes unless they are beyond repair. I always try to donate and buy from secondhand shops and always check if my friends want what I have”*. She seemed very concerned about her use of clothes and open to talk about buying from secondhand shops. Her concern for climate change was clearly reflected as her line of thinking continued, *“I like to wear jeans which are really bad for the environment. So, I check and buy from stores that sell jeans from reused clothes and use environmentally friendly chemicals. It's tough to get secondhand jeans so, I wear jeans until they're worn out. If I get a hole or stain that I can't remove, I tend to either embroidery or paint”*.

Besides buying second-hand clothes, her effort to be sustainable is mirrored by her query for sustainable criteria, creative cloth repairing and quality consideration over quantity. On the other hand, Bangladeshi participants had a different perspective. While talking about their own clothes consumption, Baishakhi said, *“Obviously, I have more clothes than my brother”*. A similar comparison with her husband was also made by Bani. Their expressions indicated that they buy more clothes than they required to conform to their gendered expectations, which was clear by their further statements. Baishakhi expressed, *“Men could go by wearing one shirt for a long time, but women prefer to have minimum presentable clothes for daily life... I mean, women consume more clothes than men...”*. She drew an argument that gender is embedded in an individual's consumption of clothes. Similarly, Bani said, *“Being a girl, it's normal to buy more clothes”*. Baishakhi and Bani believed that women's, as well as their own clothes consumption, is more than men because of their gender. However, their statements did not represent any climate concern. One of the reasons could be that buying secondhand and throwing out clothes is not common in

Bangladesh. People usually give used or old clothes to their family members and needy people. Besides, secondhand shops are not available in Bangladesh. Another reason could be that Bangladeshi female participants were more adhered to meet social expectation as mentioned by some of the Bangladeshi and Norwegian students; Nils, for instance, contended,

Women are expected to have a façade that looks perfect, like they dolled up with makeup, fine clothes and are expected to look flawless. If they have a stain, they have to take the clothes off and cover it somehow. So, the expectations for women are higher in how they look or on their body, and of course, they can't go out with their Saturday home clothes, those clothes they sit on watching Netflix, but as a guy, you can.

Nils argued that women are expected to present themselves better than men in society, and thus their reflexivity is stronger in clothing. His comparison of “Saturday home clothes” between men and women was supported by Baishakhi’s comment on “minimum presentable clothes” for women. So, the power of gender norms influences one’s consumption behavior with regards to their dressing clothes. This has been previously mentioned by Baishakhi when she associated gender identity with her clothing and social expectations (section 6.3.3). Thus, unsustainable or unconscious clothing consumption of Bangladeshi female participants could result from pressure to conform to social expectations. However, it was different for men; Nick stated, “*I don't really care about clothes*”. All other male participants shared a similar opinion like Nick that they were not that concerned about their appearance. However, Nils commented on how the development of the fashion industry is gendered and causing climate change, “*In the late '90s, there was a big increase in clothes manufacturing, especially for women. This eventually leads to growing fashion brand shops and massive production, which has become a bad habit in today's society*”. During the discussion on the causes of climate change with students, they considered mass production as one of the biggest contributing factors of climate change and unsustainability. Here, Nils spoke explicitly about the textile industry. Nils highlighted the association between climate change and gender by focusing on the fashion industry, i.e., how clothes are produced and how individuals consume clothes.

CHAPTER SUMMARY

According to participants, climate change knowledge and actions are gendered. They believed that gender differences and gender concepts are embedded in every aspect of climate change. For

example, participants' transportation choice did not reveal any gender differences in Norway, but the lack of women's safety in Bangladesh limits Bangladeshi female participants' public transport use in Bangladesh, and therefore available transportation-related forms of climate action. Gender differences also emerged in the discussion of climate vulnerability, where participants argued that women, in general, are more vulnerable to climate change than men. In addition, all participants, with the exception of Norwegian males, expressed a certain level of fear and anxiety concerning climate effects, by which one can argue that climate exposure, as well as gender, influence an individual's climate emotion. Climate concern and climate actions were also associated with the ideals of masculinity and femininity by participants. In the previous chapter, we have seen that male participants consume more meat than female participants, and they did not reflect on whether their meat consumption comes from a desire to conform to masculine traits. In this chapter, participants seemed to link meat consumption and masculinity.

Participants argued that naturally, women are more caring than men and thus more concerned about the environment and feel more responsible for climate action. Simultaneously, climate concern is explicitly and implicitly regarded as feminine by the participants. In fact, according to some participants, men understand climate change, but they do not behave sustainably as it may associate them with being feminine or uncool. An interesting point here is that though everyone undoubtedly agreed that women are more concerned about climate change, it was evident in participants' opinion that women, in general, and also female participants themselves felt that they have less influence in encouraging other people and men, in particular, to participate in climate action. Regarding climate actions, participants highlighted men's higher authority and power over women in political leadership. This gender hierarchy has also been observed while participants shared their own experiences with their family and friends.

While conforming to masculine identity repeatedly appeared as a challenge in climate change mitigation, climate action concerning clothes consumption revealed a different scenario. Participants agreed that expectations from women regarding their clothing and appearance are higher than for men, which in some instances lead women to consume more clothes. This was also apparent when participants talked about themselves. However, Norwegian female participants reflected on taking climate action by buying clothes from a second-hand shop.

8. DISCUSSION

With this thesis, I aimed to explore and compare the understanding of climate change and climate action among Bangladeshi and Norwegian students studying in Norway through a gender lens. The study focused on gender dimensions of how the concept of climate change is understood and reflected in the participants' notion of climate action. Firstly, I have looked at how men and women's opinions converge or differ in a simpler way with regards to climate change and climate action. I have also been interested in understanding gender in a more theoretical manner, i.e., how social expectations are in operation and how climate change understanding and mitigation actions are related to masculinity and femininity. This discussion is framed by three conceptual tools, namely 'doing gender', gender identity and masculinity and femininity, all falling within a social constructivist perspective of gender. Additionally, due to the lack of available literature concerning gendered climate change perceptions and mitigation actions in Asia, particularly South Asia, this discussion has been developed mostly based on the research done in Western countries.

As argued in chapter 3, there is a dearth of empirical studies comparing the perceptions of climate change and climate action between the global North and South, focusing on young people. Besides, as the perception of gender varies from place to place (Connell & Pearse, 2015), and climate change understanding is influenced by climate exposure (Haq & Ahmed, 2020), I draw a comparison between responses of the Bangladeshi and Norwegian students.

8.1 CLIMATE CHANGE UNDERSTANDING

Participants' understanding of climate change constitutes a significant part of this study. This subsection will explore and make a comparison between Bangladeshi and Norwegian participants' climate knowledge and climate action based on chapter five. Additionally, the incentives of climate inaction and the association of age and climate change understanding will be discussed here.

8.1.1 Comparison of climate information

Norway is less likely to suffer from climate change due to its geographical location (Sygna et al., 2004), whereas Bangladesh is considered an extremely vulnerable country (Rahman, 2018). Hence, participants have very different observations of natural changes. Global warming causes changes in temperature (IPCC, 2007) which ultimately affects seasonal characteristics and most students reflected on changing temperature and visible seasonal variation in their surroundings. However, differences emerged between participants when they were asked to identify

environmental threats to their own society. Notably, all participants have discussed a change in seasons, but the Norwegian participants did not stress the impact on their society resulting from this seasonal shift. Norwegian participants argued that their geographical location is one reason for not recognizing any social effects of climate change despite experiencing some environmental changes. However, two Norwegian female participants who lived part of their life in climate-vulnerable countries seemed more concerned about climate change than the other Norwegian participants. Bangladeshi participants, on the other hand, provided detailed discussions on the vulnerabilities of climate-induced disasters that impacted their society, particularly on livelihoods, agriculture, health and also their own altered habits. These findings illustrate how participants' observations of natural changes and their impacts on society are shaped by their surroundings and the extent of climate exposure. This finding resonates with Haq and Ahmed's (2020) study of climate change perceptions among young university students in Bangladesh, where they found that climate change understanding is influenced by geographical location and experienced climate events.

In comparison with Norwegian participants, Bangladeshi participants seemed to be more concerned about climate change, reflecting the argument that climate exposure and climate concern are interlinked. However, noticeable gender differences are spotted in the observation of biodiversity loss. In my study, only female participants mentioned and emphasized the changes in biodiversity or ecosystem. This indicates that their perceived concern for plants and animals is greater than the male participants, which coincides with Lee's (2009) study on adolescents, where she showed that women are more concerned about the environment than men.

Participants have talked about the emotional impact of climate change which aligns with studies that argue that climate associated emotions are influenced by climate exposure (Howe et al., 2019) and gender (Bloodhart et al., 2019). From the findings, it is visible that Bangladeshi participants were more anxious about climate change irrespective of their gender, and students explicitly talk about their high anxiety (section 7.2.1) regarding climate change. From the Norwegian participants, only female students have expressed their fear. In general, women in this study expressed greater fear than men. A previous study (Rylander et al., 2013) have found that women have increased sensitivity for the negative consequences of climate change on maternal mortality and reproductive health. However, my study participants did not relate their anxieties to

motherhood or maternal aspects. Instead, they expressed emotions of fear and sadness with regards to conservation and protection of the environment and ecosystem.

8.1.2 Climate mitigation and sense of responsibility

Coinciding with the IPCC (2007) report, all participants concluded that climate change is real, occurring and driven by anthropogenic factors. Besides, unsustainable urbanization, industrialization, mass production and GHG emissions were common causes of climate change mentioned by both Bangladeshi and Norwegian participants. Mitigation actions mentioned by participants include individual, local and global initiatives. Like in Costa and Bisquert's (2019) study, students emphasized small modifications of a personal lifestyle choice as mitigation actions, such as using less plastic or choosing sustainable food. All my participants believed that individual action is necessary to combat climate change. Interestingly, however, only female participants emphasized individual action as mitigation action, indicating that female participants were more willing to incorporate mitigation action than male participants through changing their lifestyle choices.

The local causes and mitigation steps of climate change mentioned by participants were interlinked in some way and influenced by the country's socio-demography and environment. While looking into the literature (Hasnat et al., 2019; Thomas et al., 2013) on major environmental issues, overpopulation and deforestation are found to be two significant issues in Bangladesh. Unsurprisingly, Bangladeshi students believed that deforestation and overpopulation are causing climate change locally. Hence, for Bangladeshi participants, afforestation and population control were mentioned as the solutions to climate change from a local perspective. According to the Norwegian participants, oil mining is both a political and environmental concern in Norway. While most Norwegian participants were dissatisfied and frustrated with the environmental consequences of oil extraction, one Norwegian student supported the continuation of oil mining and argued that stopping oil right away would negatively affect the Norwegian economy and lifestyles. He is a political science student, and his opinion could be influenced by his strong support for right-wing party politics.

Male participants discussed the importance of global agendas like SDGs, the Paris Agreement as a platform for mitigation action. Notably, one of the interesting arguments mentioned by Biplob is that local mitigation action should vary from place to place and be taken based on the vulnerability and ecosystem of the community. Similarly, different studies (IPCC, 2007;

Wilbanks, 2003) focus on place-based solutions. Wilbanks (2003) argued that due to the variation in climate exposure, sensitivity and coping capacities of different communities, climate strategies cannot be generalized and easily transferable between contexts. Biplob's climate mitigation knowledge seemed more nuanced and well-informed than any other study participants. His father is a climate researcher, and he acknowledged reading his father's research publications. So, his climate mitigation and adaptation insights might derive from those research articles or family discussion.

Interestingly, while male participants climate mitigation opinions circled around local and global agendas, female participants emphasized internalizing individual action in an individual's daily life. Considering the above-mentioned context of mitigation action and participants' overall conversation, I argue that female participants feel more responsibility for climate action than male participants. Female participants' stronger sense of responsibility than male participants is also apparent in their climate action.

8.1.3 Climate education sources and their influences

Education plays a vital role in an individual's life. Rousell and Cutter (2020) argued that science-based formal education is the primary source for people's climate perception and education and Dawson and Carson (2013) mentioned the subject of science and geography as particularly important. Similarly, most students agreed that school is their first source of climate education; however, there were some differences between Bangladeshi and Norwegian schools. Environment and disaster management have been a part of science and social study textbooks for a long time from primary schools in Bangladesh. Due to their experience of adverse climate events, Bangladeshi students were able to relate to disaster and changes in the environment. In contrast, Norwegian students claimed that their climate education was more *"technical and scientific"* in school, rather than engaging. Therefore, they could not understand the intensity of climate impacts at school. At the same time, students also agreed that climate change has become a recent concern in the Norwegian school program and influences students to understand sustainability.

Though students mentioned school as their first source of information, media and social media, in particular, were highlighted as their present resources of climate knowledge and awareness. In her study of social media's effects on climate change opinion and attitude, Anderson (2017) found that social media promotes climate awareness and encourages sustainable behavior, but she also acknowledged the potential negative consequences of social media. In a similar vein, most

participants referred to social media as an influence to act eco-friendly. For example, social media helped Nora incorporate sustainable action in her daily life, while Basir started using a bicycle after checking his daily carbon footprint in online media. Most of the students were inspired by different media and spoke positively; however, Nils and a few other students also shared their negative experience with the media. So, media has the power to influence participants' climate actions both in encouraging and discouraging way.

8.1.4 Politics, gender and climate action

Awareness of climate change and the willingness to act sustainably by the individual, political leaders, and the government is another highlighted point raised by students in discussing climate mitigation. As demonstrated in chapter three, it is commonly believed that developed countries are more responsible for climate change (Parks & Roberts, 2008), whereas the poorest countries in the global South experience detrimental effects among others due to the lack of resources (Connell & Pearse, 2015). Considering the above two mentioned facts, students claimed that developed countries have more responsibility to tackle climate change than developing countries. They also argued that industrialized countries and governments are aware and alarmed, but they are not taking any necessary steps as they should. According to the participants, politicians and government bodies in their own countries lack the willingness and dedication, making the participants frustrated and angry. Besides, Norwegian students pointed out the existing oil and windmills controversy of Norwegian politics. Bangladeshi participants, meanwhile, discussed the Bangladesh government's successful measures on climate change adaptation but also emphasized the country's corruption problem as a barrier to a climate solution. This resonates with Rahman's (2018) study of climate change related corruption in Bangladesh, which found that corruption is rooted in the governance system and significantly decreases the country's capacity to adapt to Bangladesh's climate stressors. However, regardless of gender and nationalities, all my participants agree that government and political parties can influence young people towards leading a sustainable lifestyle. These findings are supported by existing literature showing that the young generation believes governments are the most responsible for climate solution (Corner et al., 2015) and that political leaders can influence peoples' climate attitude (Kousser & Tranter, 2018). Research with Norwegian men revealed that climate change denial seems to have an association with right-wing nationalism (Krange et al., 2019). People supporting right-wing politics tend to deny climate change (Carrus et al., 2018) and are less worried regarding climate change in their

geographical region than people with left-wing political views (Whitman et al., 2018). Shorrocks (2018), in her study of the political gender gap of climate change in Europe and Canada, argued that women, particularly young females, are more supportive of left-wing politics than men. All the study participants agreed that women are more environmentally concerned than men, and one of the reasons mentioned for women's climate awareness is precisely the gender gap in political orientation. Normann, a political science student, argued that women, in general, support left-wing views, which influence them to become climate-concerned people. This seems to be true for Nelly, Norwegian female participant and a Green Party [centre-left party] supporter. Nelly is the only participant to illustrate the debate on political parties and climate mitigation solution. Her comprehensive understanding of climate change is well reflected, particularly through her insightful comparison between oil and windmills (section 5.4), indicating that her support for the centre-left party made her aware of sustainable solutions and strengthen her understanding of climate change and climate mitigation. In addition, a few students believed that men understand climate change, but they reject and make it justified to protect their interests by supporting the climate denial leaders and right-wing politics.

8.1.5 Age and climate concern

The current generation is experiencing climate effects more than any other previous generation, and climate impacts have threatened the young generation's future by posing several uncertainties. Thus, it is believed by UNCC that the young generation has more responsibility to combat climate change (UNCC, 2020). However, in a mixed-method study with Nigerian university graduates on climate change education and knowledge, Ayanlade and Jegede (2016) found that people who locally experience climate effects are more prone to view it as a risk, and their concern increases along with where they reside and their exposure to extreme weather conditions. From such a point of view, the climate experience and concern of young and older people in Bangladesh and Norway are expected to be different.

In my study, participants had different opinions regarding age in relation to understanding climate change and climate action. Most of the participants, particularly all the Norwegian participants, argued that the older people are not concerned with the environment because the older generation had other concerns, such as they had political tensions and were more involved in the country's development. Here, Norwegian participants brought the example of the 80's cold war, and Bangladeshi participants mentioned the liberation war of 1971. According to the participants, older

people do not seem to care so much as they might think that it is the young generation's responsibility to protect the environment. However, some Bangladeshi participants denied this claim and argued that older people have experienced gradual changes in the ecosystem, and they want their children to live in a better environment. Bangladesh has been facing adverse effects of climate change for an extended period. All the changes in agriculture, weather, disaster patterns and seasonal differences are observed and felt by the current older generation of Bangladesh. Hence, according to some Bangladeshi participants, the older generations are more anxious and worried about climate change. This perspective on the older generation indicates what is shown in the studies mentioned above that climate exposure impacts climate concern (Ayanlade & Jegede, 2016).

While most students contended that young people are more anxious because of their uncertain future, some Bangladeshi students had a different standpoint. According to them, the young generation in Bangladesh is conscious of climate change, but they are not adequately motivated to act sustainably. Besides, Belal pointed out that young people in Bangladesh cannot prioritize climate change because they have other necessary survival priorities.

It is evident that participants could recognize the danger and severity of climate change. Age has little influence on how they feel an obligation towards climate action or climate understanding, but participants' surroundings, the experience of climate events, and socioeconomic conditions impact their climate concern.

8.1.6 Reasons for individual climate action and inaction

There are several rationales that hinder or promote participants' climate action regarding food habits and transportation choice. Looking back to the literature on climate inaction, the study by Sanchez-Sabate and Sabaté (2019) found that an in-depth understanding of climate change may not always motivate an individual to have sustainable food habits. Another study (Akaichi et al., 2016) on carbon footprint and ethical food attribute demonstrated that consumers are responsive to purchasing ethical food products as long as the price isn't higher than what they can pay. All my study participants were students and thus considerate about the cost of food, which is one reason not to choose sustainable options even if they wanted to. However, female participants exhibited more consideration about sustainable food than male participants. Another highlighted study finding is the lack of knowledge and willingness to choose sustainable food, particularly by male participants. However, it is to be noted that, like prior study findings, my participants' food habits

were also influenced by their taste and culture (Schösler et al., 2015). Traditional Bangladeshi cuisine is entirely different from Norwegian. So, Bangladeshi participants' food choices were limited due to the lack of available Bangladeshi fruits, fishes and vegetables in Norway. Similarly, religion (Tan et al., 2013) impacts individuals sustainable diet. For example, Muslim participants emphasized having halal food while the only Hindu participant never had beef due to her religious obligation and was used to keeping a fast for two days every month. Interestingly, despite the fact that there are very few halal stores in Norway and Bangladeshi Muslim students who prioritize religious obligations find it challenging to have halal meat, Bangladeshi male participants often have meat.

Association between sustainable preferences and religion, social context and culture is not limited to food but also affects transportation choice. Despite knowing the cheapest and sustainable options, Bangladeshi participants did not choose or support public transport for women in Bangladesh due to religious obligations, social status, and lack of safety. Women's lack of safety in public transport is often reported in the literature (Anna et al., 2017; Gardner et al., 2017; Mazumder & Pokharel, 2019), and this was the main reason for the Bangladeshi female participants to not choose public transportation in Bangladesh. However, all Bangladeshi participants felt safe and secure in Norwegian public transport. This study findings highlight how gender norms and expectations in Bangladesh work against female participants' climate mitigation action.

In Norway, study participants use either public transportation or bicycles as transportation means, and no gender difference is observed in their transportation choice in Norway. However, cost was prioritized by the participants who chose public transportation, and those who use bicycles were consciously choosing it as a climate mitigation option. In the case of buying a new car, participants mentioned electric and hybrid cars as good alternatives for climate change. Overall, the study findings did not indicate any gender difference in preference for electric vehicles. Besides, participants wanted to ensure renewable energy sources for their electric vehicle, representing their more profound sustainability knowledge. While my participants emphasized geographical location, the study by Anfinssen, Lagesen and Ryhaug (2019) conducted in Norway demonstrated different priorities among men and women regarding electric vehicle use. They argued that women emphasize sustainability and men highlight the mechanical aspects of an electric vehicle, while

my participants talked about the lack of charging facilities for electric vehicles and public buses in remote areas are reasons to opt for a hybrid car.

8.2 GENDER IN CLIMATE CHANGE UNDERSTANDING AND MITIGATION

In the previous section, gender has been discussed to compare students' climate change understanding, and this section will look at how participants associate climate change with gender, and the topic will be discussed using a holistic lens of gender as performance. I am here inspired by West and Zimmerman (1987, p. 140), who argue that people cannot "have" gender; gender is a social construct in which people "do" gender by acting out what is expected of them. Besides, doing gender implies acting in masculine and feminine ways. Masculinity and femininity are interconnected as they only exist in the presence of each other. Perception of masculinity and femininity vary from society to society due to different cultural norms and social meanings of gender in different geopolitical contexts (Connell & Pearse, 2015, p. 84). So, people follow what is considered appropriate for their culture, and gendered norms, symbols and meanings, like their culture, change with time. Consequently, the participants have created their own gender identities within the frames of their socio-cultural background, either by adhering to gender normativity or by denying it. It is also to be noted that Bangladeshi participants indicated that they feel less pressure to conform to gender norms or gendered expectations in Norway than in Bangladesh.

8.2.1 Gender understanding in climate mitigation

In discussions surrounding gendered perceptions, the students showed a clear understanding that gender is a social construct. They, in various ways, differentiated among sex, gender and gender identity. Students reflected on how education changed their understanding of gender from the aspects of biological differences and social expectations to gender diversity. So, it can be assumed that education can also influence students' climate understanding and climate action. The findings indicate that climate education assists in participants' climate change understanding, but it has little influence on their climate action. However, as participants gender identity seemed to emerge based on social expectations and education helped them to criticize gender norms and gender stereotypes, I argue that climate change in light of gender education can also help to influence mitigation action by questioning and reshaping the ideals of masculinity and femininity.

Regardless of national differences, all participants believed that gender inequalities persist in every sphere; moreover, they all agreed that Norway is much freer in terms of gender expectations and

expressions. In a patriarchal society, gender stereotypes are more privileged, and the ideals of femininity and masculinity are more exercised than any gender-equal society (Yakin, 2004). This could be a reason Bangladeshi female participant is more concerned about expressing their gender congruent identity than the Norwegians (section 7.2.3 and 8.3.3), and this gender conformity sometimes leads to gender differences in carbon emissions and climate actions.

Gender is a social process that divides people into two groups: men and women (Ridgeway & Correll, 2004), each with their own set of socially constructed gender roles and obligations. Gender inequalities are a product of that historical social process (Yakin, 2004, p. 17), creating unequal structure and subordinate position. As participants' climate actions are directly and indirectly associated with gendered expressions and expectations, the study can further argue that establishing and promoting gender-equal social structure with non-traditional gender roles² and an inclusive gender understanding beyond categorizing the disparities between men and women can further promote gender neutral climate mitigation activities. From this perspective, the participants leave an optimistic attitude for climate change mitigation by recognizing gender as social construction where people are not obliged to follow gender-specific roles and express any gender identity in fixed/stereotypical way.

8.2.2 The idea of 'problematic men'

Participants from Bangladesh and Norway, irrespective of their gender, described the idea of masculinity and femininity with respect to the attributes of men and women. Interestingly, masculinity or masculine identity is mostly associated with negative roles and behaviors by the participants. Participants seemed to shed a negative light on men, making broad generalization indicating that men become the problem in climate mitigation and gender discussion, whereas women are presented as more caring and conscious for the environment. Students' perception of men and women in climate mitigation mirror the concept of Women in Development (WID), where specific attention is given to women's roles in the development process. Though there is a shift in focus on women to gender in development practices, development agencies and government

² "Gender roles are the roles that men and women are expected to occupy based on their sex... Individuals with nontraditional gender role orientations are more likely to believe that an individual's behavior is not or should not be determined solely by her sex" rather "in the value of egalitarian relationships between men and women and in the power of individual human beings to determine what roles they wish to occupy and the extent to which those roles are or should be associated with their sex" (Blackstone, 2003, pp. 337, 338).

continue to emphasize mostly solely on women (Coles et al., 2015). Existing empirical findings in development are more concerned with the desire to reform toxic masculine practices than the “*social consequences of patriarchal privilege and its consequences for men and women around the world*” (2015, p. 14). Thus, gender in development discussions mostly portrays men as impediments to women’s progress than as a solution to gender inequality. Participants’ negative perceptions of men in climate change could result from such stereotypes, but some of them are also based on their own experiences (section 8.2.4). The stereotypical negative picture of men’s role in society and development may also act as an obstacle for men to engage in climate action. So, it can be said that establishing an environment that acknowledges the idea of ‘new masculinity’ (Kaplan et al., 2017) and challenges conventional patriarchal social structure and masculine authority could be a way to increase men’s participation in climate change mitigation. However, since most men benefit from the association between masculinity and power, it is difficult to establish a partnership between men and women to bring a change in masculine ideas (Yakin, 2004).

The participants were reproducing the idea that men are problematic and are not attentive to climate change. However, looking into the study findings, it appeared that men as well as the male participants themselves may be more interested in politics and policies and finding a mitigation solution in a political way or by implementing different policies. Male participants indirectly indicated that climate solutions should be more incorporated within the policies than from an individual’s actions. In addition, gendered expectations influenced participants’ climate mitigation action. Male participants explicitly showed that they are careless about their gender expression through clothing. This could further make male participants less responsible for carbon emission from the perspective of their clothes consumption than female participants.

8.2.3 Sense of responsibility in gendered expectations

Stereotypical gender perceptions and cultural beliefs influence individual gender behavior (Ridgeway & Correll, 2004). However, since gender definitions and norms vary around geopolitical borders, the individual adopts what is considered acceptable for their society (Connell & Pearse, 2015, p. 84). Given the socio-cultural disparities between Bangladesh and Norway, it was expected we would find some differences in gendered expectations. Surprisingly, the social stereotypes that the students were conveying concerning women's roles were pretty similar. Women, for example, were typically seen as the main caregivers for their families and expected to

do a greater share of household work. This social expectation of '*caring*' was associated with femininity by the participants, which further may put pressure on women to act according to their gender. This was clear when Nora contended that men and women are judged differently by society regarding housekeeping. Another common expectation that both Bangladeshi and Norwegian female participants felt they had to adhere to was their appearance through clothing. These examples show how gendered expectations influenced female participants' behavior.

Bangladeshi male participants seem to feel pressure from social norms and expectations in a different way than Norwegian male participants. Biplob felt the necessity to be the 'financial provider' of his family. However, Norwegian men were well informed of gendered expectations in their society, but they did not seem to feel this as pressure on themselves in the way that the Norwegian women or Bangladeshi participants did. Besides, none of my participants had children, and most participants accepted that parenthood is strongly gendered, but they did not reflect on the potential impacts of parenthood in their own future lives.

A study (Lee, 2009) on green purchase behavior in Hongkong demonstrates that women feel more responsibility towards the environment than men and thus more involved in mitigation action. A similar link is also demonstrated in our study; according to the participants, women are stereotypically expected to be caring both for family and the planet. On the other hand, men are expected to '*live up to the masculine stereotype*' by which participants mentioned '*tough*' and not showing '*emotion*'. As central characteristics, '*caring*' and '*responsible*' were two noticeable attributes repeatedly mentioned by participants in association with women and femininity. Participants believed that women by nature are more responsible and caring than men, which in turn make women more considerate of the environment. This could further indicate that the participants might perceive women to have more responsibility in climate action because they see it as a woman's job to care for the environment. Besides, such perceptions could increase the pressure on women to behave sustainably and also make the men reluctant in following mitigation action. A similar argument is also presented by Leach (2007) when she criticized 'Mother Earth' myths and contended that the notion of women's closeness to nature is an inheritance from early ecofeminism and is initially emphasized in development circles. She referenced her previous study (Leach, 1992) and argued that assigning women to environmental protection could raise their workloads or perpetuate regressive gender norms, rather than reflecting social reform or enhanced

gender equality. In fact, the increased workload is also evident in female participants' description of their housekeeping (chapter six), illustrating how perceptions affect participants' experiences. In the same way, the connection between the environment and women could also be a product of societal gender expectations where the female participants feel pressured and responsible to 'do gender' according to specific demands. For example, Belal mentioned that women are more concerned about throwing their garbage in the right bin. Surprisingly, Beli reflected on the same point and admitted keeping a ziplock with her so that she could throw her garbage without harming the environment. So, it can be argued that participants unintentionally associated gendered expectation with sustainable action, and female participants' acting on such gendered expectation could be an outcome of 'doing gender'. Interestingly, while 'doing gender', female participants appeared to feel more responsibility to mitigate climate change than the male participants.

8.2.4 Gendered vulnerability

Environmental vulnerability, according to participants, is gendered due to the existing interconnection between climate change, poverty, and gender because the poorer countries are the most vulnerable, and women are the poorest among them; moreover, climate change triggers poverty and women suffer the most from it. Some participants, especially Basir and Nora, indicated that poverty exacerbates current gender inequalities by increasing vulnerability and making it harder for women to adapt to the change. Here, students reiterated the common presumption in the literature, an assumption that scholars like Arora-Jonsson (2011) critiqued, pointing out how women are portrayed as vulnerable due to their status as the "poorest of the poor". She explained how emphasizing women and their vulnerability or virtuousness may divert focus from the power structures and reproduced inequalities in institutions and climate change discourses. According to her, gender in development practices is often seen as a simplistic difference between men and women in which women are seen as vulnerable and oppressed. Participants' generalizations about women as vulnerable to climate change ignore significant gender gaps in knowledge, resources, and power that shape climate change development and adaptation outcomes. However, there were also students who recognized the power structures and cultural differences within various communities, and they showed an intersectional sensitivity. Some students, such as Basir, even employed the concept of 'intersectionality' while others talked about combined vulnerability. Basir's interpretations of gender and climate change reflected back to participants' argument regarding the association between climate change understanding and

education and that education plays a vital role in understanding climate change. Basir, a student of social development, admitted that climate change and gender has been part of his study. He is the only participant who mentioned both combined vulnerability and intersectionality. Thus, it can be argued that his education has helped him to understand climate change vulnerability in a different manner than the other participants.

8.2.5 Gendered influence in climate action

According to Rasmussen (2009), hegemonic masculinity has control over any other masculinity and over femininity. Feminist Political Ecology (FPE) argues that gender normativity reflects social differences by forming a power order and making certain people underprivileged. While Norway is considered a gender-equal country, students still identified differences in gender norms and expectations for men and women. Gendered power imbalances are more prevalent in Bangladesh than in Norway, and power dimensions become apparent in mitigation action discussion. For example, Basir compared his influence on parents regarding climate mitigation measures with his well-educated sisters. He claimed that his parents would tend to listen to him more because of his gender. As a male, he holds more authority than his sisters in his family. Similarly, Baishakhi contended that it was more difficult for her to convince her male friends towards moving in the direction of sustainable action than female friends. In addition, both Bangladeshi and Norwegian female participants felt that men have more protesting attitudes because of their gender and their self-esteem restricts them from acknowledging any opinion or recommendation from women on sustainable actions. Men's such opposing attitudes could stem from internalized stereotypical masculine ego, that by definition (Ridgeway & Correll, 2004) hold a higher position than feminine traits, and this 'masculine ego' enables men to concentrate on their own benefits and to strive for power and independence. Additionally, from a global context, participants concluded that political and climate leaders or decision-makers are mostly men, and thus men hold more power and responsibility in mitigating climate change than women. In general, study participants see women as more mindful of climate change, but they also contend that men have a more significant influence over others in taking sustainable action.

8.3 GENDER, GENDER IDENTITY AND CLIMATE ACTION

Gender identity is both our personal sense of masculine or feminine identity or a combination thereof (Morrow, 2006) and how we are viewed by others (Rasmussen, 2009). According to social

cognitive theory, gender identity is created by the combination of personal and social influences as well as self-awareness of biological sex (Bussey, 2011). In addition, identity-forming is a complex process and identity can be shaped and transformed by a variety of social experiences over the course of a person's life. So, even if two individuals show similar gender identity, their gender-related behavior patterns may vary widely but drawing back on gender as socially constructed, it is evident that one is only free to construct oneself within a set of boundaries.

The study participants seemed to be well aware of the concept of gender identity; however, they were more comfortable using the word masculinity and femininity to share and explain their experiences. The link between climate change and gender identity is well reflected in the findings on gender and climate action. In these subsections, I will primarily highlight those relationships and explain how they affect participants' actions.

Female participants clearly demonstrated greater climate concern and a more sustainable attitude than male participants. According to the participants, since sustainable behavior is viewed as feminine, it influences men's decisions about mitigation actions. This conclusion is compatible with previous studies by Brough et al. (2016), who claimed that because of the green-feminine stereotype, both men and women consider eco-friendly goods and attitudes to be feminine than other environmentally harmful products and manner. Besides, men are more inclined to protect their gender identity. So, they can oppose environmentally friendly behavior because of the association between green action and femininity. However, my study has also revealed some rationales for participants' climate inaction (section 8.1.5) in their daily lives, and gender has been partly addressed in those rationales. In addition to drawing the association between gender identity and climate action, this section will partially shed light on students' own sustainable action and whether these climate actions are gendered.

8.3.1 Food

The literature review in Chapter 3 showed that stereotypical preconceived masculine and feminine perceptions affect sustainable food intake; for example, Zhu, Brescoll, Newman, and Uhlmann (2015) claimed that masculinity is linked with meat and unhealthy eating, whereas being vegan or balanced eating is viewed as feminine. The relation between meat and masculinity is claimed to come from the hunter-gatherer era when men were expected to search for food and provide for their families (Schösler et al., 2015). Though food is important to conform to one's masculinity, women are less concerned than men with making gender congruent food choices (Gal & Wilkie,

2010). Rothgerber (2013), in a quantitative study with undergraduate students in Kentucky, also revealed that female participants are less likely to eat meat than males and showed that masculinity is positively associated with meat consumption.

Gender and food consumption have already been slightly touched upon under section 8.1.5, in which it was shown that the study participant's food consumption is linked with culture, religion, and cost. The participants also showed gender differences in their food intake; based on their self-reported diet, male participants consume more meat than female. Besides, none of my participants is vegan or vegetarian, and only one Bangladeshi female participant stated to eat less meat in a conscious effort to be more sustainable. However, most participants, both men and women, showed awareness of how the meat industry might lead to climate change and the vegan diet's environmental benefits. Despite having an in-depth understanding of the climate impact on food production, most male participants did not pay attention to adapting a sustainable diet. This indicates that participants' awareness was not always reflected in their action. This study's findings somewhat coincide with Sanchez-Sabate and Sabaté (2019), in which they argued that environmental concern is not always the primary motive to curtail meat intake. They also drew references to other studies (Campbell-Arvai, 2015; De Groeve & Bleys, 2017) on university students and demonstrated that climate and meat-related information may not always influence participants' willingness to alter their food choices. Normann is an interesting example. Though he explicitly explained his concern about the environment regarding food, his entire food discussion and everyday food consumption, particularly 'beef and chicken', revealed his lack of interest in climate-friendly food. Sincerity for sustainable food choices is missing in all the male participants except Nick, who acknowledged his lack of climate knowledge in food consumption. On the other hand, in line with other studies (Lee, 2009; Rothgerber, 2013; Sanchez-Sabate & Sabaté, 2019), female participants exhibited more concern for the environment than men in their food consumption.

Norwegian female participants reflected on the stereotypical assumption that meat consumption is an admirable positive masculine trait and being vegetarian is feminine. Nelly highlighted that growing muscles are desirable by most men, which is a reason for men's affinity towards meat. According to the participants, meat is one of the primary protein sources and thus more necessary in the diet than vegetables for muscle development. This is another interesting aspect because although male participants did not mention that their own meat consumption was motivated by a

need to grow more muscles, they directly correlated muscles with masculinity. So, according to male participants, muscles are important to protect one's masculinity. Thus, their meat consumption indirectly corresponds to the validation of masculinity. Again, as the participants pointed out, failure to meet male standards may lead to humiliation, so men are inclined to stick to the norm. Thus, male participants' meat consumption could also be interpreted as an action to represent masculine traits and, by implication, to resist feminine traits in reaction to social gender expectations. Therefore, it can also be argued that binary gendered understandings with associated norms and penalties for not conforming to gendered expectations hinder climate action.

8.3.2 Transportation

As argued in the literature review, transportation is gendered, and the transportation area is often viewed as a masculine field of concern and competence (Wang, 2016). In addition, taking risks on the road is associated with masculine identities (Connell & Messerschmidt, 2005). Cristaldi (2005) observed gender disparity between men and women's transportation use and showed that women travel more sustainably by using public vehicles than men.

In this study, all participants acknowledged and accepted that individual transportation choices have an impact on environmental sustainability. Several opinions regarding transportation have already been demonstrated in section 8.1.5, where it was shown that no significant link is found between participants' transportation choice and gender in Norway. However, Nora, who clearly accepted and reflected on how social perception influenced her house's cleanliness activities (section 6.3.2), also gave some interesting points regarding gendered car driving (section 7.2.1). According to her, if she and her partner both had their own cars, her partner would drive more, and this could be due to her lesser interest in driving. In the same discussion, she also implicitly suggested that cars represent men's dignity, and transportation is an area of men's interest that symbolize masculinity. This revealed her dilemma in gender understanding, but it also indicates that though she resists them, traditional gender perceptions may still affect her life and gender perception.

Electric vehicles are not common in Bangladesh, but all students could recognize the environmental benefit of electric cars. A few Norwegian female students associated electric cars with femininity; for example, Nelly argued that an electric car is seen as feminine, restricting her male friends from choosing an electric car. However, she also observed that her younger brother and his friends are more open to embracing electric vehicles. According to Nelly, men who are

comparatively younger or do not consider social judgements are more prone to support electric vehicle than men who idealized traditional masculinity, despite the fact that electric vehicle use could represent them as feminine. Nelly's statements highlight the trend of 'undoing gender' (Deutsch, 2007) in electric vehicle use by the young generation and reflected on the 'new masculinity' (Kaplan et al., 2017) where men embrace stereotypically feminine features from self-awareness across life spheres and challenging gendered restrictions. Her argument indicates how men's climate action may be hindered by traditional masculinity but also be promoted by new masculinity.

8.3.3 Clothing

Clothing is one of the main factors of upholding gendered beauty standards and thus relates to one's gender identity (Goodman et al., 2007). All the male participants indicated that they were not concerned about their clothing. On the other hand, most female participants in my study agreed that they carry out certain activities which are typically different from men, such as wearing makeup and gender-appropriate dresses to express their feminine identity. This dichotomy of being masculine or feminine in accordance with society's gender norms is learned by an individual from childhood (Connell, 2002), and eventually, people tend to express their gender-associated identity through their appearance. In their study of sustainable consumption and gender, Bloodhart and Swim (2020) reflected on the association of social norms and sustainable behavior. They argued that gender norms shape how an individual thinks and responds to sustainable consumption. While discussing gendered norms and expectations with my female participants, they indicated that gender identity and social expectations highly influence their clothing patterns and clothes consumption behavior. Such a situation highlights how actions and interactions associated with 'doing gender' affect the everyday lived experiences of study participants and the embodied nature of gender norms.

Most participants argued that to conform to social expectations, women generally tend to buy more clothes than men, which has been mentioned as an unsustainable measure by some participants because the clothing industry causes a substantial amount of pollution. Bangladeshi female participants, however, seemed to acknowledge that they do buy more clothes than they need, and they normalized their own 'overconsumption' by their gender. This argument highlights how participants' gender, with its expectations and norms, as collectively associated with consumerism, becomes a strategy and a tool for justifying actions which they acknowledge as harmful to the

climate. Thus, following the perspective of ‘doing gender’ (West & Zimmerman, 1987) through the performance of socially constructed masculine and feminine attributes, ‘undoing gender’ (Deutsch, 2007) could not only help to challenge gender norms and stereotypically gendered expectation but also could facilitate individuals’ gender-associated climate mitigation decisions.

8.4 LIMITATIONS AND CHALLENGES

Due to the pandemic, the data collection process was hampered by uncertainty and restrictions, as described above. Face to face interviews is always advantageous to qualitative study, and I was anxious about the quality of the data in 'zoom'. However, I found that my worries did not come true as I was able to have full concentration while using the digital platform. My participants were young university students in Norway who were familiar with using digital technologies. Due to their previous experience and uninterrupted internet facilities, I did not face any difficulties regarding the 'zoom' interview. Besides, the digital interview allowed me to note the facial expressions, reactions and voice changes depending on the subject and think about probe questions. All the participants were relaxed and friendly in the interview. However, participants who were using zoom seemed to be more comfortable in their home setting and did not seem to be bothered about the time or length of the interview, while those who were interviewed face to face did.

My participant recruitment was specified in the age range of 18 and 30, which turned out to be a big challenge for the recruitment of Bangladeshi student (section 4.3). It thus took me a long time to recruit Bangladeshi student. Besides, my initial plan was to interview UiB students; however, I had to change my plan as I was giving priority to the age limitation.

The understanding of language is at the forefront of qualitative analysis (Van Nes et al., 2010). As I believe people are comfortable in their mother tongue, I offered my Bangladeshi participants to decide whether they wanted to speak in English or Bangla. Three of my participants had chosen to speak in Bangla, and I translated their interviews into English. Since translation is an interpretive act, meaning can be lost in the course of translation (Van Nes et al., 2010). To reduce the loss of meaning, translated transcriptions were sent back to the three participants to ensure that the translations were correct.

My study has a limited number of participants. This is a weakness regarding the transferability of the study.

9. CONCLUSION

"Children are the future of a nation". Following this international saying, youth can be referred to as the present. Considering the power of this present, this study explored gendered perceptions of climate change and climate action among Norwegian and Bangladeshi students studying in Norway. Despite being raised in two different countries with different climate change contexts, it is evident that young participants are knowledgeable about climate change and climate action.

The school was commonly mentioned as the first place to know about climate change, but social media inspired students to practice individual mitigation strategies and climate understanding. Pertaining to climate influence, participants seemed unhappy with political leaders in Norway and Bangladesh due to their lack of willingness and dedication to take action. However, this study argues that climate exposure, geographical location and climate education influence participants' climate change understanding; thus, Bangladeshi participants appeared as more knowledgeable, concerned, and emotionally disturbed by climate change than the Norwegians. Apparently, gender is not correlated with enhanced climate knowledge, but it seemed to impact participants' climate concern and climate emotions, i.e., female participants were more concerned for the environment and expressed more climate associated emotions than the male participants.

Act locally, think globally— this well-known old saying is actualized in participants' discussion of climate mitigation. Participants were well informed about how individual actions contribute to global mitigation. Interestingly, while male participants stressed policy implications and/or fulfilling the global climate mitigation agenda, female participants emphasized individual mitigation strategies, showing that female participants' individual sense of responsibility to mitigate climate change was higher than that of the male participants. Even while considering gendered expectations and comparing participants' daily activities, female students appeared more inclined to carry out individual mitigation actions than male students, in line with the previous claim on the sense of climate mitigation responsibility. Yet, participants considered and experienced that men have stronger impacts than women on others to make them take more sustainable actions, both individually and globally.

Besides having proper incentives and motivation to be sustainable, participants' climate action and inaction stemmed from their willingness, financial ability, sociocultural background, climate mitigation facilities and perceptions of gender. Participants' observation encompassing gender and climate change mirrored how traditional gender roles and ideals of masculinity and femininity

constrain an individual's climate action. In general, students reflected more on how they perceive others and social norms than themselves in regard to climate action. Women were considered more caring than men by participants, and they also associated 'care' with femininity. This association may not only encourage women to participate in mitigation action but also can act as a burden on them in the form of a felt obligation to uphold their femininity by being environmentally friendly. A negative discourse on men and masculinity regarding climate change has also been observed among the participants, which may hinder men from following climate mitigation strategies. As unconsciously internalized gender norms in association with one's gender identity influence climate inaction, promoting nontraditional gender roles and understanding gender diversity could encourage and support sustainable actions.

Participants did not explicitly recognize or correlate their climate action with their gender identity, but when looking at this study's findings, it is evident that ideals of masculinity and femininity have emerged as relevant in shaping their gendered behaviors. Considering the influence of masculinity and femininity in participants' personal lives, I will argue that male participants' meat consumption and female participants' 'overconsumption' of clothes is connected to their expressions of masculinity and femininity, respectively. However, this study also indicates that "undoing gender" and reformulating the idea of traditional masculinity in the direction of a 'new masculinity' could promote climate action and foster the notion of an equal share of climate responsibility from a gender standpoint. Additionally, the study has shown that the binary concept of gender understanding has negative consequences on climate action; hence, altering the view of gender from dichotomy to diversity could further enable and support mitigation action. In this regard, participants' increased openness about personal preferences to what individuals choose to be in deciding and expressing their gender identity indicates a new discourse of social diversity that accepts and possibly encourages nontraditional gender behaviors of mitigation action.

This study has limitations with sample size and time, but the findings reveal that irrespective of experiencing different climate exposure, participants are knowledgeable and aware of climate change, indicating an optimistic view from the context of climate mitigation. However, further studies are required to understand how students can be encouraged to act more environmentally friendly and contribute to achieving the sustainable development goal 13; climate change.

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APPENDICES

APPENDIX 1. ENGLISH INTERVIEW GUIDE FOR THE INDIVIDUAL **INTERVIEW**

Introduction

1. Introduce myself and my purpose of the study.
2. Introduce why the participant has been selected and their relevance to the study
3. Introduce the interview process, such as recording devices and consent to record, a quick review of ethical consent which includes confidentiality of data storage and anonymity, the right to withdraw at any point.

Background

1. Please can you introduce yourself, tell me about your study subject, degree and age group.
2. Do you have any siblings?
3. Where have you grown up and what about the weather there?

Climate change and gender

1. What is your first thought when you hear the word "climate change"?
 - a) How do you understand the causes of climate change?
 - b) Are there any natural changes that you have noticed in recent years?
 - c) Do you think that there is an effect of climate change in your personal life and society? Please explain.
 - d) Do you think that young people are more climate anxious (chronic fear of environmental crisis) than their previous/older generation? Please elaborate.
2. What is your first thought when you hear the word "gender"?
 - a) How will you define gender? Any specific example or activities.
 - b) How do you view differences in gender?
 - c) Do you think there are expectations from friends and society as a male or female?
 - d) How old were you when you first notice or experience gender differences? Or when did you first notice gender differences in your personal life?
3. Do you feel that there is any connection between climate change and gender? Please explain.

Global commitment

1. Can you please describe the sources of climate change education for you?

2. In which way the political parties and media can drive the motivation of a society to act eco-friendly? Please explain.
3. Do you feel any commitment towards climate change mitigation?
 - a) How will you explain the responsibility to respond to global climate change? Do you feel it as a burden or extra pressure?
4. Are you or have you been a member of any environment concerned club/group?
 - a) If yes, what was your motivation to join? Have you observed any gender differentiating actions in the activities of the club/group?
 - b) If not, why not?
4. What do you think about what would be the best way to tackle climate change at the local and global level?

Climate action

1. Have you changed your way of living as a result of your knowledge about climate change?
 - a) How does it affect (positively/negatively) you? Any example.

2. Food consumption

- a) Do you prepare meals every day?
- b) What do you typically eat for dinner/lunch?
- c) What are the most common foods in your diet list? Why do you prefer to have that particular food?
- d) What is in your preference list while choosing any food?
- e) Are you concerned about climate-friendly food products? If so, how have you been motivated?
- f) Have you ever observed any gender difference in food habit/food intake/food preference among your family members and friends?

3. Transportation

- a) What is your preferred way of travelling when you have available options such as by air, road and why?
- b) How often do you use public transport? Why do/don't you prefer to choose public transport? Please explain.
- c) If you were to buy a car, which one do you prefer? Do you think that you prefer to buy an electric or solar car, and why?
- d) Do you think that your transportation choice has an importance in the context of global warming or climate change?

e) Do you think that there is a difference between men and women when it comes to transportation habit? Please explain.

4. Power use

- a) When is the last time you change your laptop/phone/TV/monitor? How frequently do you change your electronic gadgets and why?
- b) What about your clothing consumption?
- c) Do you think paying more for environmentally friendly products/behavior is acceptable? Please elaborate.

5. Waste management

- a) Do you practice sorting waste?
 - b) Do you practice sorting the plastic, glass, tin, food waste?
 - c) Have you heard about 3R (Reduce, Reuse, Recycle)? What is the value of 3R in your life?
 - d) Are you concerned about your use of paper and plastic in your daily life?
 - e) How do you believe waste management could be improved?
6. Is there any scope of improvement for yourself regarding climate change action?

Gender identity and gender roles

- 1. How will you define masculinity and femininity?
- 2. Do you think that there are strong differences between gender in your society?
 - a) Are there any limitations to what men and women can do in your society?
- 3. How do you understand the concept of gender identity?
 - a) Can you think of any daily activity which is related to your gender identity?
 - b) How much are you aware of gender identity in your daily activities?
 - c) Do you think that there is a connection between your gender identity and climate change action? Please explain.
- 4. Do you think there is a difference between men and women regarding climate change understanding?
- 5. Do you believe that climate change influences gender inequality in society? Please explain.

Closing remarks

- 1. Please mention any additional comments if you want to add.
- 2. Express gratitude for the participation.

APPENDIX 2. BANGLA INTERVIEW GUIDE FOR THE INDIVIDUAL

INTERVIEW

ভূমিকা

- ১। নিজের পরিচয় দিন এবং এই স্টাডির পেছনের কারণ বর্ণনা করুন।
- ২। অংশগ্রহনকারীকে কেন, কিসের ভিত্তিতে নির্বাচন করেছেন এবং স্টাডির সাথে তার প্রাসঙ্গিকতা ব্যাখ্যা করুন।
- ৩। সাক্ষাতকার গ্রহণের প্রক্রিয়া সম্পর্কে যেমন রেকর্ডিং ডিভাইস, রেকর্ড করার আগে অনুমতি গ্রহণ, ethical consent অর্থাৎ অংশগ্রহনকারীর পরিচয় এবং তথ্যের গোপনীয়তা বজায় রাখা এবং যেকোনো সময়ে সাক্ষাতকার ত্যাগ বা বন্ধ করার প্রক্রিয়া সম্পর্কে বিস্তারিত বলুন।

পটভূমি

- ১। অনুগ্রহ করে নিজের পরিচয়, কোন বিষয়ে এবং কোন পর্যায়ে লেখাপড়া করেছেন এবং আপনার বয়স সম্পর্কে বলুন।
- ২। আপনার কি কোনো ভাইবোন আছে? হ্যাঁ হলে, সে সম্পর্কে বলুন।
- ৩। আপনি কোথায় (কোন জায়গায়, গ্রামে/শহরে) বড় হয়েছেন? সেখানের আবহাওয়া সম্পর্কে কিছু বলবেন।

জলবায়ু পরিবর্তন ও জেডার

- ১। Climate change বা জলবায়ু পরিবর্তন – কথাটা শুনলে প্রথমেই কী মনে হয়?
 - ক) আবহাওয়া পরিবর্তনের কারণ বলতে আপনি কী বোঝেন? কীভাবে বোঝেন?
 - খ) সমসাময়িক সময়ে আপনি কী কোনো প্রাকৃতিক পরিবর্তন লক্ষ্য করেছেন?
 - গ) আপনার ব্যক্তিগত জীবন বা সমাজের উপর এই আবহাওয়া পরিবর্তনের কোনো প্রভাব আছে কী? কী মনে হয় আপনার?
 - ঘ) আপনার কী মনে হয়, পূর্ববর্তী প্রজন্মের চেয়ে নতুন প্রজন্ম জলবায়ু পরিবর্তন বিষয়ে বেশি উদ্বিগ্ন (climate anxious)? বিস্তারিত বলবেন।
- ২। জেডার বা লিঙ্গ শব্দটি শুনলে আপনার প্রথম কী মনে হয়?
 - ক) জেডার বলতে আপনি কী বোঝেন? একটি যথাযথ উদাহরণ দিয়ে বুঝিয়ে বলতে পারেন।
 - খ) জেডার/লিঙ্গ বৈষম্যকে আপনি কীভাবে দেখেন?
 - গ) আপনার কী মনে হয়, নারী বা পুরুষ ভেদে পরিবার বা সমাজ থেকে কিছু প্রত্যাশা থাকে? কী ধরনের প্রত্যাশা? এর মাঝে কী কোনো ভিন্নতা আছে?
 - ঘ) কত বছর বয়সে আপনি প্রথম জেডার/লিঙ্গ বৈষম্য অনুভব করেন বা এ সম্পর্কে জানতে পারেন? আপনার ব্যক্তিগত জীবনে প্রথম কবে আপনি জেডার/লিঙ্গ বৈষম্যের স্বীকার হন?
- ৩। জেডার/লিঙ্গ এবং জলবায়ু পরিবর্তনের মাঝে কী কোনো সম্পর্ক আছে? কী মনে হয় আপনার? বিস্তারিত বলুন।

গ্লোবাল কমিটমেন্ট (Global commitment)

- ১। আপনার জন্য জলবায়ু পরিবর্তন শিক্ষার উৎস কি? বর্ণনা করুন।
- ২। রাজনৈতিক দল এবং মিডিয়া কীভাবে সমাজকে পরিবেশবান্ধব উপায়ে চলার জন্য প্রভাবিত করতে পারে? বিস্তারিত বলুন।

৩। জলবায়ু পরিবর্তন নিরসনের প্রতি আপনি কোন প্রতিশ্রুতি বা দায়িত্ব বোধ করেন?

ক) বিশ্বব্যাপী জলবায়ু পরিবর্তনের প্রতি আপনার দায়িত্বকে কীভাবে ব্যাখ্যা করবেন? ব্যাপারটা কী আপনার জন্য বোঝা বা অতিরিক্ত চাপ হিসেবে কাজ করে?

৪। আপনি কী পরিবেশ সচেতনতা বিষয়ক কোনো ক্লাব/গ্রুপ-এর সদস্য? বা আগে ছিলেন?

ক) যদি হ্যাঁ হয়, কেন যোগদান করেছিলেন আপনি? সেই ক্লাব/গ্রুপে, জেডার/লিঙ্গ বৈষম্য আছে এমন কোনো কর্মসূচী কী আপনি লক্ষ্য করেছেন?

খ) যদি না হয়, কেন নয়?

৫। স্থানীয় এবং বিশ্বব্যাপী জলবায়ু পরিবর্তন সামাল দেয়ার সর্বশ্রেষ্ঠ উপায় কী বলে আপনি মনে করেন?

Climate action

১। জলবায়ু পরিবর্তন সম্পর্কে জানার পর কী আপনার জীবনযাত্রায় কোনো পরিবর্তন এসেছে?

ক) পরিবর্তনগুলো আপনাকে কীভাবে প্রভাবিত করছে? ইতিবাচকভাবে নাকি নেতিবাচকভাবে? উদাহরণ দিয়ে বলবেন।

২। খাদ্য গ্রহন (Food consumption)

ক) আপনি কী প্রতিদিন রান্না করেন/প্রতিদিনের খাবার প্রতিদিন তৈরি করেন?

খ) দুপুর বা রাতে আপনি সাধারণত কী খান?

গ) আপনার খাদ্য তালিকায় সবচেয়ে কম বা সবসময় থাকে এমন খাবার কী কী? আপনি কেন এই খাবারগুলো খেতে পছন্দ করেন বা খান?

ঘ) কীসের উপর ভিত্তি করে আপনি কোনো খাদ্য (খাবার) পছন্দ করেন বা খাওয়ার জন্য নির্বাচন করেন?

ঙ) পরিবেশ-উপযোগী খাবার নিয়ে কী আপনি চিন্তিত বা আগ্রহী? যদি হন, তাহলে কীভাবে এই ব্যাপারে আপনি আগ্রহী হলেন?

চ) পরিবার এবং বন্ধুদের মধ্যে কী আপনি কখনো খাদ্যাভ্যাস/খাদ্য গ্রহন/খাদ্যের পছন্দ নিয়ে কোনো প্রকার লিঙ্গ বৈষম্য দেখেছেন?

৩। পরিবহন

ক) কোথাও যাবার জন্য বিভিন্ন মাধ্যম (আকাশপথ, সড়কপথ ইত্যাদি) থাকলে, আপনি কোনটি বাছাই করবেন সেখান থেকে? কেন করবেন?

খ) আপনি কী গনপরিবহন ব্যবহার করেন? যদি করেন, তাহলে কেন করেন? যদি না করেন, তাহলে কেন করেন না? বিস্তারিত বলুন।

গ) যদি আপনি একটি গাড়ি কিনেন, তাহলে কোন গাড়ি কিনবেন? আপনি কী কোনো ইলেক্ট্রিক বা সোলার কার কেনার কথা ভাববেন? কেন?

ঘ) আপনি কী মনে করেন, আপনি কোন ধরনের পরিবহন/যানবাহন পছন্দ করেছেন তার প্রভাব জলবায়ু পরিবর্তন বা বৈশ্বিক উষ্ণতার (global warming or climate change) উপর পড়ছে?

ঙ) আপনি কী মনে করেন, নারী ও পুরুষের যানবাহনের পছন্দের মধ্যে কোনো ভিন্নতা আছে? বিস্তারিত বলুন।

৪। শক্তি ব্যবহার (Power use)

- ক) আপনি শেষ কবে আপনার ল্যাপটপ/ফোন/টেলিভিশন/মনিটর বদল করেছেন? সাধারণত কত দিন পর পর আপনি আপনার ইলেকট্রনিক গ্যাজেটগুলো বদল করেন? কেন?
- খ) আপনার জামা কাপড়ের ব্যবহার সম্পর্কে বলুন? কী পরিমাণ কাপড়/পোশাক কেনেন আপনি?
- গ) পরিবেশবান্ধব প্রোডাক্ট কেনার ক্ষেত্রে, বেশি পরিমাণ অর্থ খরচ করা কী আপনার জন্য গ্রহণযোগ্য মনে হয়? বিস্তারিত বলুন।

৫। বর্জ্য ব্যবস্থাপনা

- ক) বিভিন্ন প্রকার অনুসারে, আপনি কী আপনার দৈনন্দিন বর্জ্য বাছাই করেন?
 - খ) আপনি কী বর্জ্যকে প্লাস্টিক, গ্লাস, টিন, খাদ্যবর্জ্য হিসেবে বাছাই করেন?
 - গ) আপনি কী কখনো 3R (Reduce – ব্যবহার কমানো, Reuse – পুনরায় ব্যবহার, Recycle – পুনর্ব্যবহারযোগ্য করা) সম্পর্কে শুনেছেন? আপনার জীবনে 3R-এর প্রভাব/মূল্য কী?
 - ঘ) আপনি কী আপনার দৈনন্দিন জীবনে প্লাস্টিক এবং কাগজের (পেপারের) ব্যবহার সম্পর্কে চিন্তিত/উদ্বিগ্ন?
 - ঙ) বর্জ্য ব্যবস্থাপনাকে কীভাবে আরো উন্নত করা যায় বলে আপনি মনে করেন/বিশ্বাস করেন?
- ৬। জলবায়ু পরিবর্তন কমানোর জন্য আপনার Climate action (ক্লাইমেট একশন) উন্নত/পরিবর্তন করার কী কোনো সুযোগ আছে? থাকলে কী রকম সেটা?

Gender identity and gender roles

- ১। Masculinity এবং femininity কে আপনি কীভাবে সংজ্ঞায়িত করেন?
- ২। আপনি কী মনে করেন, আপনার সমাজে বিভিন্ন জেন্ডারের মধ্যে বেশ শক্ত/প্রবল পার্থক্য আছে?
- ক) আপনার সমাজে, নারী বা পুরুষ হিসেবে একজন কী করতে পারবে তার উপর কি কোনো নিষেধাজ্ঞা আছে?
- ৩। জেন্ডার আইডেনটিটি (gender identity) বলতে আপনি কী বোঝেন?
- ক) আপনি দৈনন্দিন কোনো কাজের কথা মনে করতে পারেন যা আপনার জেন্ডার আইডেনটিটি (gender identity)-এর সাথে সম্পর্কিত?
- খ) দৈনন্দিন জীবনের কর্মকাণ্ডে আপনি জেন্ডার আইডেনটিটি (gender identity) বিষয়ে কতটা সচেতন?
- গ) আপনি কী মনে করেন জেন্ডার আইডেনটিটি (gender identity) এবং জলবায়ু পরিবর্তন – এর মধ্যে কোনো সম্পর্ক আছে? বিস্তারিত বলুন।
- ৪। আপনি কী মনে করেন নারী ও পুরুষ জলবায়ু পরিবর্তনকে আলাদাভাবে সঙ্গায়িত করে?
- ৫। আপনি কী বিশ্বাস করেন যে জলবায়ু পরিবর্তন সমাজে লিঙ্গ বৈষম্যকে (gender inequality) প্রভাবিত করে? বিস্তারিত বলুন।

সমাপনী বক্তব্য

- ১। কোনো বিষয়ে যদি আপনার অন্য কোনো মন্তব্য থাকে, তাহলে তা বলুন।
- ২। অংশগ্রহণের জন্য কৃতজ্ঞতা প্রকাশ করুন।

APPENDIX 3. INFORMATION LETTER AND CONSENT FORM

Are you interested in taking part in the research project "Gendered Perception of Climate Change and Climate Action"?

This is an inquiry about participation in a research project where the main purpose is to explore the 'Gendered Perception of Climate Change and Climate Action'. In this letter, we will give you information about the purpose of the project and what your participation will involve.

Purpose of the project

The project is conducted to fulfil the requirements of the master's thesis in Global Development Theory and Practice. The main objective of the study is to explore and compare gendered perception of climate change and climate action among Norwegian and Bangladeshi students studying and living in Norway.

Who is responsible for the research project?

- Haldis Haukanes
Professor at the department of Health Promotion and Development, University of Bergen
- Tasnina Karim
Student of MPhil in Global Development Theory and Practice, University of Bergen

Why are you being asked to participate?

All participants of this study are selected based on two criteria:

- Either Norwegian or Bangladeshi students who are studying and living in Norway
- Age between 20 and 30 years old

In this study, a total number of 12 students have been asked to participate in individual interviews.

What does participation involve for you?

Participation in this study will consist of the following options:

- a. Semi-structured individual interview

If you chose to take part in the study, this will involve that you will be interviewed by the student who is responsible for this research project. The interview will focus on your perception and experience of gender, climate change and climate action. It will take approximately between 45-60 minutes. Data will be recorded by an audio recorder or via zoom application and in the form of written notes taken by the researcher during the interview.

Participation is voluntary

- Participation in the project is voluntary. If you choose to participate, you can withdraw your consent at any time without giving a reason and your data will be erased. All information about you will be anonymous during the study to prevent any unintended negative consequences.

Your personal privacy – how we will store and use your personal data

- We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with the data protection legislation (the General Data Protection Regulation and Personal Data Act).
- Only the student and her supervisor at the University of Bergen, will have access to the personal data.
- The University of Bergen's SAFE system will be used to guarantee that no unauthorized persons are able to access your personal information. This implies that data will be saved at UiB server by a VPN connection.
- Participants will not be recognizable in any publication.

What will happen to your personal data at the end of the research project?

- The project is scheduled to end by June 2021. All audio files will be deleted after they have been transcribed by the responsible student. Collected data will be anonymized at the end of the project.

Your rights

So long as you can be identified in the collected data, you have the right to:

- Access the personal data that is being processed about you
- Request that your personal data is deleted
- Request that incorrect personal data about you is corrected/rectified
- Receive a copy of your personal data (data portability), and
- Send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

- We will process your personal data based on your consent. Based on an agreement with two responsible persons (mentioned above), NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

- Haldis Haukanes
Professor in the department of Health Promotion and Development, University of Bergen
Email: Haldis.Haukanes@uib.no
- Tasnina Karim
Student of MPhil in Global Development Theory and Practice, University of Bergen
Email: kttasninakarimiub@gmail.com
- Our Data Protection Officer
- NSD – The Norwegian Centre for Research Data AS
Email: personvertjenester@nsd.no
Contact number: +47 55 58 21 17

Yours sincerely,

Project Leader.
Haldis Haukanes

Consent form

I have received and understood information about the project [insert project title] and have been given the opportunity to ask questions. I give consent:

- ☐ to participate in an interview
- ☐ for my recorded voice to be stored until they were transcribed

I give consent for my personal data to be processed until the end date of the project, approx. July 2021

(Signed by participant, date)

APPENDIX 4. DATA ANALYSIS CODING TABLE

Basic theme	Organizing theme	Global theme
<ul style="list-style-type: none"> - Changes in weather - Natural imbalance - Human development - Increased frequency and intensity of damages in natural disasters - Seasonal changes 	Observed changes in the surrounding	Understanding of Climate Knowledge
<ul style="list-style-type: none"> - Greenhouse gas - Unsustainable development - Natural imbalance 	Causes of climate change	
<ul style="list-style-type: none"> - Anxiety and fear - Habitual changes - Depressive emotions 	Effects of climate change in personal life	
<ul style="list-style-type: none"> - Livelihood - Migration - Poverty - Diseases - No effect 	Social effects of climate change	
<ul style="list-style-type: none"> - Climate anxiety among the young generation - Climate anxiety among the older generation 	Climate anxiety	
<ul style="list-style-type: none"> - School - Media - Political parties 	Influence of climate change and climate education	
<ul style="list-style-type: none"> - Local action - Global action 	Mitigation action	
<ul style="list-style-type: none"> - Sustainable options are expensive. - Lack of climate friendly facilities - Lack of knowledge - Lack of willingness - Sociocultural background 	Climate inaction	
<ul style="list-style-type: none"> - Gender (dichotomy and diversity) - Gender identity - Masculinity and femininity 	Gender perceptions	Understanding of Gender
<ul style="list-style-type: none"> - Parenting - Traditional gender role - Gender expressions 	Social expectations	

Basic theme	Organizing theme	Global theme
<ul style="list-style-type: none"> - Women are more concern about climate change than men. - Sustainable actions are feminine. - Masculinity/men - obstacle for climate actions. - Association between political orientation, gender, and climate change understanding. - Gender differences in encouraging climate actions. 	Gender in climate change	Climate Change Understanding and Gender
<ul style="list-style-type: none"> - Intersectionality - Gendered vulnerability - Climate associated emotion 	Gender and climate impacts	
<ul style="list-style-type: none"> - Sense of responsibility in gendered expectations - Sense of responsibility in individual actions 	Sense of responsibility to mitigate climate change	
<ul style="list-style-type: none"> - Gender differences in sustainable diet awareness. - Gender differences in meat consumption - Association between meat consumption and masculinity. 	Food consumption	Mitigation Actions and Gender
<ul style="list-style-type: none"> - Gender difference in transportation choice in Bangladesh. - No gender differences in transportation choice in Norway. - Transportation is a masculine field. - Electric vehicles are feminine 	Transportation choices	
<ul style="list-style-type: none"> - Gender difference in clothes consumptions - Clothes consumption is associated with gender identity, gendered expectations, and social norms. 	Clothes consumption	

APPENDIX 5. RESEARCH APPROVAL BY NSD



NSD's assessment

Project title

Explore and Compare the Gendered Perception of Climate Change and Climate Action among Norwegian and Bangladeshi Students Studying and Living in Norway

Reference number

159741

Registered

25.06.2020 av Tasnina Karim - Tasnina.Karim@student.uib.no

Data controller (institution responsible for the project)

Universitetet i Bergen / Det psykologiske fakultet / Hemil-senteret

Project leader (academic employee/supervisor or PhD candidate)

Haldis Haukanes, haldis.haukanes@uib.no, tlf: 4755589259

Type of project

Student project, Master's thesis

Contact information, student

Tasnina Karim, pek012@student.uib.no, tlf: 4746362412

Project period

05.08.2020 - 30.06.2021

Status

01.07.2020 - Assessed

Assessment (1)

01.07.2020 - Assessed

Our assessment is that the processing of personal data in this project will comply with data protection legislation, so long as it is carried out in accordance with what is documented in the Notification Form and attachments, dated 01.07.2020, as well as in correspondence with NSD. Everything is in place for the processing to begin.

NOTIFY CHANGES

If you intend to make changes to the processing of personal data in this project it may be necessary to notify NSD. This is done by updating the Notification Form. On our website we explain which changes must be notified. Wait until you receive an answer from us before you carry out the changes.

TYPE OF DATA AND DURATION

The project will be processing special categories of personal data about racial or ethnic origin, political opinions and general categories of personal data, until 30.06.2021.

LEGAL BASIS

The project will gain consent from data subjects to process their personal data. We find that consent will meet the necessary requirements under art. 4 (11) and 7, in that it will be a freely given, specific, informed and unambiguous statement or action, which will be documented and can be withdrawn.

The legal basis for processing special categories of personal data is therefore explicit consent given by the data subject, cf. the General Data Protection Regulation art. 6.1 a), cf. art. 9.2 a), cf. the Personal Data Act § 10, cf. § 9 (2).

PRINCIPLES RELATING TO PROCESSING PERSONAL DATA

NSD finds that the planned processing of personal data will be in accordance with the principles under the General Data Protection Regulation regarding:

- lawfulness, fairness and transparency (art. 5.1 a), in that data subjects will receive sufficient information about the processing and will give their consent
- purpose limitation (art. 5.1 b), in that personal data will be collected for specified, explicit and legitimate purposes, and will not be processed for new, incompatible purposes
- data minimisation (art. 5.1 c), in that only personal data which are adequate, relevant and necessary for the purpose of the project will be processed
- storage limitation (art. 5.1 e), in that personal data will not be stored for longer than is necessary to fulfil the project's purpose

THE RIGHTS OF DATA SUBJECTS

Data subjects will have the following rights in this project: transparency (art. 12), information (art. 13), access (art. 15), rectification (art. 16), erasure (art. 17), restriction of processing (art. 18), notification (art. 19), data portability (art. 20). These rights apply so long as the data subject can be identified in the collected data.

NSD finds that the information that will be given to data subjects about the processing of their personal data will meet the legal requirements for form and content, cf. art. 12.1 and art. 13.

We remind you that if a data subject contacts you about their rights, the data controller has a duty to reply within a month.

FOLLOW YOUR INSTITUTION'S GUIDELINES

NSD presupposes that the project will meet the requirements of accuracy (art. 5.1 d), integrity and confidentiality (art. 5.1 f) and security (art. 32) when processing personal data.

To ensure that these requirements are met you must follow your institution's internal guidelines and/or consult with your institution (i.e. the institution responsible for the project).

FOLLOW-UP OF THE PROJECT

NSD will follow up the progress of the project at the planned end date in order to determine whether the processing of personal data has been concluded.

Good luck with the project!

Contact person at NSD: Henrik Netland Svensen
Data Protection Services for Research: +47 55 58 21 17 (press 1)